REPORT RESUMES

ED 012 230 RE 000 182

TEACHING THE EDUCABLE MENTALLY RETARDED CHILD TO READ.
BY- BLACK, MILLARD H. AND OTHERS
LOS ANGELES CITY SCHOOLS, CALIF.
REPORT NUMBER LACS-IB-EC-106 PUB DATE 66
EDRS PRICE MF-$0.18 HC-$3.28 82P.

DESCRIPTORS- *EDUCABLE MENTALLY HANDICAPPED, *ELEMENTARY GRADES, *READING INSTRUCTION, *CURRICULUM GUIDES, TEACHING TECHNIQUES, TEACHING PROCEDURES, READING PROGRAMS, READING SKILLS, LEARNING ACTIVITIES, LOS ANGELES,

AN INSTRUCTIONAL BULLETIN TO ASSIST TEACHERS OF THE EDUCABLE MENTALLY RETARDED CHILD IN THE DEVELOPMENT OF READING SKILLS WAS PREPARED FOR THE LOS ANGELES CITY ELEMENTARY SCHOOLS. THE BULLETIN IS DIVIDED INTO FOUR SECTIONS WHICH INCLUDE AN INTRODUCTION, A DISCUSSION OF THE DEVELOPMENTAL SEQUENCE NECESSARY FOR EFFECTIVE READING INSTRUCTION, SUGGESTIONS FOR STIMULATING THE DEVELOPMENT OF THOSE FACTORS, AND SOME PROCEDURES FOR EFFECTIVE READING INSTRUCTION. AN APPENDIX PRESENTS ACTIVITIES FOR DEVELOPING SENSORY PERCEPTION AND DISCRIMINATION, FOR PRACTICING THE SKILLS DEVELOPED IN SPECIFIC READING LESSONS, AND FOR INDEPENDENT PRACTICE OR DRILL. (BK)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED012230

TEACHING THE EDUCABLE MENTALLY RETARDED CHILD TO READ

LOS ANGELES CITY SCHOOLS
DIVISION OF INSTRUCTIONAL SERVICES
CURRICULUM BRANCH
INSTRUCTIONAL BULLETIN NO. EC-106
1966

FOREWORD

This instructional bulletin has been prepared to assist teachers of educable mentally retarded pupils in the Los Angeles City elementary schools in the development of reading skills. The goals and techniques of instruction discussed in this bulletin have been adapted to the characteristics of the pupil who, although of limited capacity, has the ability to learn to read for information, for promotion of health and safety, and for recreation.

Teaching the Educable Mentally Retarded Child to Read is divided into four major sections and an appendix. The major sections contain an introduction, a discussion of the developmental sequence which appears to be requisite to effective reading instruction, some suggestions for stimulating the development of these factors, and some of the procedures which comprise effective reading instruction. The appendix contains many examples of activities for developing sensory perception and discrimination, for practicing the skills which are developed in specific reading lessons, and for independent practice or drill.

EVERETT CHAFFEE
Associate Superintendent
Division of Instructional Services

ACKNOWLEDGMENTS

Preparation of Teaching the Educable Mentally Retarded Child to Read has been made possible through the joint efforts of teachers, supervisors, and administrators who have assisted in its development.

These members of the Elementary Reading Committee reviewed the manuscript and offered suggestions which are reflected in its content:

Violet Alenhouse
Violet Carter
Richard Clower
Alice Curtis
Rena Everly
Verna French
Frances Gaebke
Rudolph Holguin
Tom Jefferson
Gloria Kalnay
Miriam Keslar
Virginia Powers
Duke Saunders
Cheryl Sparti
Irene Watson

The assistance of the following Special Education Supervisors is acknowledged with particular gratitude. Their many suggestions of content and their continuing review of the manuscript have been a major contribution to the development of the publication.

J. Douglas Elliott
Fidel Pontrelli
Juanita Salaway
Jane Toland
Doris Wubben

Appreciation is expressed to the members of the Point of View Committee of the Elementary Curriculum Council, who reviewed the manuscript.

Henry A. Lalane, Consultant, Special Projects, Curriculum Branch, has contributed through his guidance in technical phases of the preparation of the publication.

MILLARD H. BLACK
Elementary Reading Supervisor
Curriculum Branch

LAVON HARPER WHITEHOUSE
Elementary Curriculum Coordinator

AVERILL M. CHAPMAN
Administrator of Curriculum

APPROVED:

ROBERT J. PURDY
Associate Superintendent
Division of Elementary Education

EVERETT CHAFFEE
Associate Superintendent
Division of Instructional Services

TABLE OF CONTENTS

Page

FOREWORD iii

ACKNOWLEDGEMENTS iv

INTRODUCTION 1

THE IMPORTANCE OF READING TO THE MENTALLY RETARDED PERSON 1

CHARACTERISTICS OF THE MENTALLY RETARDED CHILD WHICH AFFECT READING INSTRUCTION 1

DEVELOPMENTAL AREAS WHICH APPEAR TO HAVE A DIRECT RELATION TO READING INSTRUCTION 2

General Health 2
Neurological Status 3
Mental Maturity 3
Oral Language Background 3

A BALANCED INSTRUCTIONAL PROGRAM 5

DEVELOPING READINESS IN THE PRE-COMPULSORY CLASSROOM 7

PERSONAL AND SOCIAL ADJUSTMENT 7

REALIZATION OF THE VALUE OF AND THE NEED FOR READING 8

ABILITY TO PERCEIVE RELATIONSHIPS 9

AUDITORY EFFICIENCY AND DISCRIMINATION 9

VISUAL EFFICIENCY AND DISCRIMINATION 10

COLOR DISCRIMINATION 11

APPROPRIATE TEACHING AND LEARNING ACTIVITIES IN THE PRE-COMPULSORY CLASSROOM 13

GENERAL ACTIVITIES FOR TRAINING THE SENSES 14

Stimulating Auditory Discrimination 14
Stimulating Visual Development 15
Stimulating Color Discrimination 16
Stimulating the Development of the Sense of Taste 16
Stimulating the Development of the Sense of Smell 16
Stimulating the Development of the Sense of Touch 17
Stimulating the Development of the Sense of Weight 17
Stimulating the Development of the Sense of Temperature 17
Stimulating the Development of the Sense of Time 17
Stimulating the Development of the Sense of Volume 18
Stimulating the Development of the Sense of Pressure 18
Stimulating the Pupil's Association of Experiences With Symbols . 18

Page

APPROPRIATE TEACHING AND LEARNING ACTIVITIES IN PRIMARY, INTERMEDIATE, AND UPPER CLASSES FOR EDUCABLE MENTALLY RETARDED PUPILS 21

GROUPING FOR READING INSTRUCTION 21

LEVELS OF READING INSTRUCTION 22

SUGGESTED CLASSROOM MANAGEMENT OF THREE READING GROUPS AT THE PRIMARY, INTERMEDIATE, AND UPPER LEVELS 23

IMPLICATIONS FOR READING OF THE CHARACTERISTICS OF THE EDUCABLE MENTALLY RETARDED CHILD. 24

Slower Pace 24
Practice 24
Review and Drill 24
Detailed Explanation 24
Concrete Illustrations 24
Short-Range Goals 24
Oral Rereading 24

BUILDING A BACKGROUND OF EXPERIENCE 25

APPROACHES TO THE TEACHING OF READING 25

Sight Vocabulary 26
Word Recognition Skills 26
Materials for Reading 26
Integration of Communication Skills 27
Motivation for Reading 27
Classroom Organization 27
Evaluation of Pupil Progress 27

TEACHING CHILDREN TO READ BY THE LANGUAGE-EXPERIENCE APPROACH . . . 27

Some Ways of Using the Language-Experience Approach 28
Summary of Steps in Chart Preparation and Use 29
Example of Experience Story 29
Using Experience Charts in the Reading Group 30
Vocabulary Development and Control 31
Developing Word Recognition Skills 32

TEACHING PUPILS TO READ BY THE BASAL READER APPROACH 33

Checking Recognition of the Vocabulary of the Pre-Primers 34
The Directed Reading Lesson 34

Page

APPENDIX 37

EXAMPLES OF ACTIVITIES FOR DEVELOPING SENSORY PERCEPTION AND DISCRIMINATION 37

- Visual Perception and Discrimination 37
- Auditory Perception and Discrimination 42
- Tactile Perception and Discrimination 44
- Olfactory Perception and Discrimination 45
- Gustatory Perception and Discrimination 45

EXAMPLES OF READING FOLLOW-UP ACTIVITIES 47

EXAMPLES OF PRACTICE MATERIALS AND ACTIVITIES 68

- Manipulative Practice Activities and Educational Aids 69
- Educational Games 71
- Matching Activities 73
- Miscellaneous Activities 74
- Related Independent and Semi-independent Activities 76

INTRODUCTION

This instructional bulletin is designed to help teachers of mentally retarded children adapt methods of reading instruction to the particular needs and characteristics of the individual pupils with whom they work. The mentally retarded child is more like than unlike the normal pupil; the needs, capabilities, and limitations of the mentally retarded child must be recognized and considered in the teaching program. He can learn to read, if the teacher is capable and enthusiastic, and if instruction is systematic. The enthusiastic teacher can aid this pupil to sense the desirability of reading, to broaden the scope of his interests, and to widen his horizons. His interest in reading may be stimulated by a class in which reading is used in most of the activities and in which the environment is rich and vital.

THE IMPORTANCE OF READING TO THE MENTALLY RETARDED PERSON

If a citizen is to be self-supporting, reading is a requisite. He must learn to read signs; he must be able to read job application forms; he must take aptitude examinations, such as driver's tests, if he is to earn a living; and highway signs of all types must be correctly interpreted, for both his own safety and that of other persons with whom he shares crowded streets. The process of obtaining an appropriate education demands both the learning of reading skills and their use to obtain various types of information. Enjoyment through reading, although limited in nature, is possible for persons of low intellectual capacity. All of the above considerations make a sound and realistic instructional program in reading necessary for the educational fulfillment of the EMR child.

CHARACTERISTICS OF THE MENTALLY RETARDED CHILD WHICH AFFECT READING INSTRUCTION

Each type of exceptional child is defined by a characteristic departure from the norm. Educable mentally retarded children differ most from the norm in their ease of learning. It is true that no single characteristic, except slow mental development, is typical of all retarded children and that every other difficulty may be detected in some intellectually average children; however, there are certain problems that are so common to the retarded group as to provide a basis for broad educational planning.

According to Jordan, the following is a synthesis of the psycho-educational characteristics which interfere with the retarded child's ability to learn:

> The rate of learning is slow.
>
> Retention is poor, requiring overlearning and frequent review.
>
> Language abilities are deficient.
>
> Learning tends to be concrete, with lessened ability to handle the abstract.
>
> There is a lowered tolerance for frustration.
>
> The attention span tends to be short.

> Imagination and creativity are weak, leading to a predisposition to perseveration and resistance to change.
>
> There is relatively little spontaneous learning, making it necessary to include more common learnings in the curriculum.
>
> Transfer and generalization occur less often and less spontaneously.
>
> These characteristics will have further handicapped the child before he enters school by limiting or distorting the experiential background so essential to reading success. The way in which reading is introduced will largely determine his lasting attitudes toward reading.[1]

Some children who are diagnosed as mentally retarded also may have limited cultural backgrounds. Cultural limitations may be compensated for in part by providing experiential and language activities. These children should be assisted in interpreting and verbalizing the experiences about which they read.

DEVELOPMENTAL AREAS WHICH APPEAR TO HAVE A DIRECT RELATION TO READING INSTRUCTION

Both formal research and teacher observation have demonstrated the importance to the learning process of the following areas of physical and/or psychological development:

GENERAL HEALTH. A sound body makes the learning of any skill easier. When energy is lacking, when pain is present, or when there is neurological malfunction, the efficiency of learning is lessened.

While the formal evaluation of health status is primarily the responsibility of medical personnel, it also is a matter of major concern to the teacher; for efficient learning cannot occur when ill health is present. The teacher often is the one person intimately associated with the child who also is able to observe him objectively and to evaluate day-to-day differences in his appearance and conduct. It is important that the activities of the classroom be directed toward the development of adequate health concepts and habits.

If the child shows any of the following symptoms of subnormal physical health, the problem should be discussed with the school nurse:

> Is not interested in playing or in any group activity
>
> Cries easily
>
> Is generally disinterested
>
> Is easily irritated
>
> Tires easily
>
> Has cold hands
>
> Has pale or blue lips

---

[1] Laura Jordan, "Reading and the Young Mentally Retarded Child," Mentally Retarded (Feb., 1963), p. 25.

Has eyes that are inflamed, or that tear easily

Is considerably underweight or overweight

Is a "mouth-breather"

Has poor posture

NEUROLOGICAL STATUS. Although the great majority of pupils in classes for the mentally retarded are able to learn with only minor modifications of the instructional techniques which have proved satisfactory for average pupils, different approaches to learning will have to be devised for a few children in order to circumvent neurological disability.

MENTAL MATURITY. A mental age of six and one-half years (78 months) long has been accepted as the minimum age for initiating reading instruction.[2] Many educators, however, question the application of this criterion to every child. Increasing understanding of the influence of individual differences on the learning process has caused teachers and administrators to realize that the experiences of some children enable them to be ready to profit from reading instruction at an earlier mental age, while the particular circumstances in which other children are reared indicate that for them reading instruction may be profitably delayed while they undertake a program of oral language development.

Mental age should be used as only one criterion in determining whether mentally retarded children whose chronological age is eight years or older but whose mental age is at primary level (less than 78 months) should receive formal reading instruction. It may be that, because of their greater chronological age, some retarded pupils possess an experiential background which in many areas exceeds that of a normal child of six or six and one-half years.

ORAL LANGUAGE BACKGROUND. Facility in the use of oral language, with regard to both vocabulary and language structure, appears to be closely related to achievement in beginning reading activities.

Children in classes for the Educable Mentally Retarded vary as much as children in regular grades do in the oral language experiences they have had prior to entering school. Some children come from homes where they hear a wide range of well-chosen words. They have had many opportunities to talk with other persons--in their homes, at Sunday school, in nursery school, and in other social situations. Stories have been read to them, they have learned nursery rhymes, and they have been encouraged to express themselves verbally. As a result, they express themselves with relative ease; and their language skills are ample to enable them to profit from initial reading instruction. On the other hand, some children come from environments in which language activities are severely curtailed. Some come from homes where most of the conversation is in a foreign language. The English words they hear are few in number, are limited in meaning, and, frequently, are used inappropriately. Certain sounds of English are not present in their parents' native tongue, with the result that these children do not hear and are not able to reproduce those particular sounds. The total cultural pattern of some homes is dissimilar to that of the teachers with whom they will work in school. These language and cultural dissimilarities between teachers and their pupils must be considered, in addition to the mentally retarded child's restricted capacity to learn.

---

[2] Mable V. Morphett and Carleton Washburne, "When Should Children Begin to Read?" Elementary School Journal (March, 1931), pp. 496-503.

Strickland includes the following in discussing the effect of pre-school experiences on language growth:

> The greater contact the child has with his mother's friendly voice, the more readily may he be expected to acquire language.
>
> Unrealistic standards established in the home tend to retard language development.
>
> A normal family situation tends to stimulate language growth more than does an institutional environment.
>
> More rapid language development is generally found among children who associate largely with adults than among children whose association is largely with peers; this development is reflected in vocabulary, sentence length, and sentence structure.
>
> Opportunity for verbal interaction with parents has a positive effect upon language development.
>
> Bilingualism may present problems which involve language, intelligence, emotion, and social adjustment, both in the home and the community.[3]

In developing the quality of oral language, the teacher becomes the model for all children in the classroom. This model is of particular importance for the pupil who comes from a home in which English is a second language; here the pupil, for the first time, may have the opportunity to learn the sounds of the language in which he must communicate if he is to become economically and social competent.

Gates and other writers have suggested that for some children such experiences as visits to the zoo, to rural areas, and to parks and museums, and participation in other activities commonplace in the life of middle- and upper-class children may be needed as a part of the curriculum if appropriate progress in reading is to be expected. These authorities assert that, since such activities are represented in the basal readers, pupils need to have had these experiences in order to read with meaning when they encounter such content.

Readiness for reading is furthered by the many opportunities for oral expression provided in a program which is rich in activities which stimulate discussion and in which storytelling is prevalent. It is through oral activities within the classroom that the quality of oral language is improved. However, placement of pupils in oral language situations will not in and of itself correct gross deficiencies; language patterns must be identified with and by pupils; they must assist in setting standards of language usage in the classroom.

Many mentally handicapped children at the primary level will be interested in reading, having been in classrooms where they saw other children develop effective reading skills. Some of these pupils will have had only an oral language development program, directed by teachers who were keenly aware of their needs. Others may have received instruction from which they profited little, but which did not frustrate them. Some pupils in primary-level classes may have developed antipathies to reading instruction for which they were developmentally unprepared.

---

[3] Ruth Strickland, The Language Arts in the Elementary School (Boston: Heath, 1957), pp. 45-56.

The importance of other areas of mental and physical development--social adjustment, realization of the value of and need for reading, ability to perceive relationships, visual maturation and efficiency, color discrimination, and auditory efficiency--are discussed in detail in the section titled "Developing Reading Readiness."

A BALANCED INSTRUCTIONAL PROGRAM

Reading skills are unquestionably important, but they should not be developed at the expense of other subject areas. Basic computational skills, information and attitudes which will lead to responsible citizenship, understandings which will make the pupil value his physical and mental health, and experiences with art and music--all have their claim upon the hours in the school day. To neglect these areas in an effort to promote reading skill, thereby causing an imbalance in the instructional program, may only serve to handicap the pupil further.

DEVELOPING READINESS IN THE PRE-COMPULSORY CLASSROOM

In this section, some of the factors which contribute to readiness for instruction in reading will be discussed. Criteria for evaluating the levels of development attained by children also will be considered.

The pre-compulsory years should be a period in which a background for effective reading instruction is developed. Structured experiences in the many areas which are believed to be necessary to success in initial reading instruction should be provided.

The pupil in pre-compulsory EMR classes obviously should not be plunged into formal reading instruction. However, a teacher who failed to provide instruction based on a recognition of the pupil's needs which relate directly to reading ability would be doing him an equally great disservice.

The six- to eight-year-old mentally retarded pupil will benefit from extensive participation in meaningful language activities. The development of vocabulary and sentence patterns will be enhanced by neighborhood walking trips, a rich audio-visual program, a wide use of books in a storytelling or reading program, and similar activities which emphasize the role of oral language.

PERSONAL AND SOCIAL ADJUSTMENT

Some of the indices of adjustment adequate for participation in reading instruction are presented below. The child who possesses adequate adjustment:

Observes rights of other children in the room

Distinguishes between the real and the unreal

Assumes the role of both leader and follower, not rejecting either situation

Reacts positively to teacher, principal, custodian, and playground leaders

Assumes responsibility for sharing in the conduct of the room and care of materials, supplies, and equipment

Exhibits few anti-social tendencies

Sustains attention to pictures, games, and stories for 5 to 15 minutes

Evaluates his own work according to simple standards

Maintains emotional equilibrium

Persists in activities which present difficulty but are not frustrating

Develops a concept of himself as a worthy individual

Perceives himself appropriately in physical relationship to other persons and to physical objects

Finds satisfaction in school activities

Most, if not all, of these areas are susceptible of development within the classroom. The teacher has an opportunity and an obligation to contribute to the future welfare of the pupil by providing learning activities which develop these many areas of personal and social adjustment.

REALIZATION OF THE VALUE OF AND THE NEED FOR READING

Most research in this area indicates a positive correlation between an aggressive effort toward learning to read and success in the activity itself. It would appear logical to assume that at a given level of maturity there would be an apparent difference between the desires for reading (a) of a child from a home where all members of the family read with enjoyment and where there are many books, and (b) of a child from a home in which reading is considered relatively unimportant.

Lack of concern for reading must be evaluated in the light of the child's social background. Consideration of the background will aid in determining whether the lack of concern is truly indicative of a developmental state or is social in nature.

The following have been reported from various sources as evidences of the child's desire to read and of readiness for instruction:

Asks to have stories read

Helps choose stories

"Reads" pictures in books

Points to words in books

Foretells events in stories

Verbalizes enjoyment of books and stories

Helps keep a record of stories read

Participates in dramatic representation of stories read

Contributes toward the making of books

Handles books

Contributes own books and/or chooses from this selection

Locates name on desk, in team lists, on chart of room responsibilities

Locates stored materials by labels comprising both a picture and name

Attempts to read signs and notices

A classroom environment in which attractive books abound, and a teaching program in which many stories are told and read, will stimulate the development of many of the evidences of readiness listed above.

ABILITY TO PERCEIVE RELATIONSHIPS

Perception is the process whereby a particular sensation is given meaning. The meaning we associate with a particular perception comes from the relationships of stimulus, transmission, integration, and interpretation.

The ability to perceive the relationships between speech elements and graphic symbols appears to be necessary to learning to read. When the psychoneurological properties involved in the associative process are impaired, a kinesthetic instructional technique may be employed to partially circumvent the disorder. However, most EMR pupils appear to be able to learn to read when a normal visual-auditory approach, with modifications appropriate to their learning characteristics, is used. The following evidences of perceptual readiness may be sought:

Ability to associate symbols with things they represent, such as letter-sound relationships

Ability to select, evaluate, and organize ideas, such as organizing picture puzzles and games

Ability to apply new learning in a problem-solving situation

Ability to perceive oral language-experience relationships, such as arranging drawings or pictures to represent a story which has been told

Ability to associate cause and effect

AUDITORY EFFICIENCY AND DISCRIMINATION

Betts states that "the ability to discriminate between speech sounds is a basic factor in language readiness for reading."[4] He also points out the importance of aural efficiency (or the psycho-neurological ability to hear). Inability to identify the sounds which comprise the words which are used in oral communication, whether arising from impairment of the aural apparatus, from a perceptual disability, or from lack of experience, is clearly a handicapping factor in learning to read. Some pupils are unable to distinguish fine differences, as in fall and fell, or gross differences, as in men and hen. Other pupils are unable to blend the component sounds of a word into a semantic unit; for instance, when the separate sounds of br and ing are given, they cannot blend them into bring. The problems presented by either of these disabilities are obvious.

The pupil is expected to learn that sounds and letters have relationships which, within certain limits, are reliable. The task of making the correct phoneme-grapheme associations and blending the various sounds into words--the essence of phonetic analysis--may be rendered almost impossible if hearing impairment exists or if the pupil fails to develop the skills of auditory discrimination.

---

[4] Emmett A. Betts, Foundations of Reading Instruction (New York: American Book Co., 1957), pp. 347-52.

The problem of teaching the mentally handicapped child to generalize sufficiently to make phonetic analysis practicable is in itself difficult; the presence of hearing impairment or of inadequate discrimination may present an insurmountable problem.

Impaired hearing evidences itself in many ways. The most common functional evidences are:

Slow, incomplete response, or absence of response, to directions

Inattention

Repeated mistakes in classroom or playground responses

Inaccurate responses in rhythmic activities

Inaccurate or difficult tonal responses

Slow or inaccurate responses in rhyming activities

Evidence of different quality or response to different tones of voice or music

Physical manifestations of impaired hearing include:

Discharge from ears

Head turned to one side when child is listening

Chronic earache

The presence of any of these symptoms should be discussed with medical personnel, who will make appropriate recommendations. Classroom adjustments also should be made.

VISUAL EFFICIENCY AND DISCRIMINATION

Reading is a visual skill of the highest order. The ability to see efficiently, clearly, singly, and distinctly at all working distances is the basis of visual discrimination. Many recent studies confirm the importance of skill in visual discrimination for success in early reading. Some researchers feel that visual discrimination is even more important for success in initial reading instruction than the child's native intelligence.

The child whose binocular vision at near-point is immature to the degree that he sees fuzzy, blurred, and indistinct letters becomes the victim of frustration. Because of eye discomfort, accompanied by blurring of the pages, the child may come to believe that learning to read is impossible. Appropriate instruction for such a child would exclude activities at near-point.

The purpose of activities which help the pupil to discriminate among objects, letters, and words is not primarily the acquisition of speed in discrimination. Rather, the training should emphasize accuracy in recognizing and comparing forms, differentiating among letters, and accurately perceiving the whole word.

The determination and correction of impaired vision are medical functions for which the teacher is not trained. Evidence in the child of some of the functional symptoms listed below should be discussed with medical personnel.

Squints and rubs eyes

Shades eyes continuously

Holds work 8 to 10 inches from eyes

Tilts head to one side or the other

Says light hurts eyes

Thrusts head forward

Frowns, scowls, etc., frequently

Physical evidences include:

Tears repeatedly when using eyes at near- or far-point

Complains of eye fatigue, recurring headaches, nausea or dizziness after using eyes for a reasonable period at near- or far-point

Tends toward involuntary movement of one eye when concentrating visually

Blinks excessively

Has discharge around eyes

Has crossed eyes

Shows difference in size of pupils

Has inflamed or encrusted eyelids

Has widely dilated pupils

The child with known or suspected visual difficulties should be seated where he will have opportunity to employ efficiently the ability he possesses.

COLOR DISCRIMINATION

By observing pupils as they match colored papers, etc., the teacher can readily determine each pupil's color sensitivity. Total color blindness is rare; partial insensitivity is more common. Care need be taken to differentiate between ignorance of the names of colors and shades and the inability to distinguish among them.

Very simple screening techniques may be employed. The teacher may provide sets of colored papers, varying in shape and size, for the children to match. In another activity (red-green), the teacher may ask the child to select the red strips from two green and two red strips given him. Children who are not successful in these activities should be referred to the school nurse.

Color is important in the activities of the early reading program. Children who are not color blind may be taught to identify the various colors.

APPROPRIATE TEACHING AND LEARNING ACTIVITIES IN THE PRE-COMPULSORY CLASSROOM

In preceding paragraphs in this guide, the roles of oral language skill and of experience as determinants of success in learning to read have been discussed. For most children in pre-compulsory classes for educable mentally retarded pupils, growth in oral language skills will constitute a prime goal. Activities to promote general sensory discrimination and to increase the effectiveness of the pupil's ability to listen, to speak, and to follow directions will occupy a major share of the pupil's time and attention.

In planning the daily program of the pre-compulsory EMR pupil, a recognition of certain basic principles is necessary:

> Frequent changes of activities are demanded by his very limited attention.
>
> Quiet and active periods of work and play should be alternated.
>
> Work demanding the greatest attention and concentration for learning may best be accomplished during the first part of the day, before the child becomes fatigued.
>
> Rest or relaxation should precede and follow nutrition and lunch periods, and additional rest periods should be provided, as needed.

Some of the following will be a part of the classroom activity of every school day; all may be used to further the ability of the pupil to use effectively the skills of listening, of speaking, and of following directions and, thereby, to increase the probability of his success in the act of reading.

> Listening to directions given by the teacher and by other pupils
>
> Listening to and responding to signals, such as bells and buzzers
>
> Listening to music as a subject area, as recreation, and as a signal (as in games of various kinds)
>
> Listening to stories told by the teacher or heard in a study center
>
> Actively responding to stories heard, by participating in dramatic representations of many types
>
> Enjoying picture books
>
> Playing group games
>
> Learning to describe and, later, to classify objects in terms of size, color, and texture

In developing both the general plan for the pre-compulsory daily program and the particular activities which comprise instruction, it should be kept in mind that the entire pre-compulsory program is essentially one of readiness development which emphasizes growth in oral language skills.

GENERAL ACTIVITIES FOR TRAINING THE SENSES

Discriminating use of the senses is basic to all learning. In contrast to the wide powers of observation which may be expected in the normal child of six or six and one-half years chronological age, in the mentally retarded child the various senses may be underdeveloped. Since all the senses are employed in obtaining information, it is important for any program designed to assist the retarded child in achieving his limited potential to include a sensory training program. Oral activity is the focal point of the pre-compulsory program, and training all of the senses contributes to the development of oral language skill.

"Many sense-training activities arise from the needs and activities of the children in the classroom. Others may be introduced as the teacher sees a need for further emphasis in particular sensory discrimination. Teachers of the mentally retarded young child are ever alert to utilize every teaching situation possible for the development of all senses. Practical recognition of the importance of basic principles of sensory development will make teaching more effective."[5] In sensory development and training, it is important to proceed from the definite to the less definite, moving from:

Vivid to subdued colors	Loud to indistinct sounds
Strong to delicate odors	Distinctive to delicate flavors[6]
Pronounced to slight touch sensations	

Suggestions for sensory training in various areas are given in the paragraphs below. It is important that continuing evaluation be a part of the instructional program. When it is believed that adequate discrimination has been developed, instruction in a more advanced activity should be provided.

STIMULATING AUDITORY DISCRIMINATION. Auditory discrimination may be improved as the child gains in ability to:

Recognize common sounds heard in the classroom

Recognize voices of classmates

Discriminate between distant and near sounds

Differentiate rhythmic pattern sounds:
Fast - Slow   Loud - Soft   Skip - Walk   Run - Hop

Faulty discrimination due to an inadequate background may be corrected by many activities. It should not be assumed that the symptoms observed are due only to lack of experience; the physical factor should always be evaluated by medical personnel.

Some suggestions for stimulating auditory discrimination are:

Helping pupils learn to listen for a particular sound in everyday school activities

---

[5] Education of the Mentally Handicapped Child: A Guide for Elementary Teachers, Publication No. EC-194 (Los Angeles City Schools, 1957), pp. 252-53.

[6] Ibid., p. 253.

Guiding pupils to note how other persons sound as they speak

Using a tape recorder, provide situations in which the child can hear how he sounds to other persons

Leading discussions in which there is opportunity to describe sounds that are significant, unusual, likeable, disagreeable, or common

Stressing and practicing clear and natural enunciation

Encouraging child-participation in many and varied language activities

Developing standards for speaking and listening

Providing activities, such as those suggested in the Appendix, to help pupils recognize the sounds with which words begin

STIMULATING VISUAL DEVELOPMENT. The ability to recognize visual contrasts may be developed by helping pupils to:

Provide situations in which are inherent interest, purpose, meaning, and opportunity for orderly observation.

Proceed from the definite to the less definite, in moving from pronounced to slight visual sensations.

Recognize such visual contrasts as:

Large ball - Small ball
Wide ribbon - Narrow ribbon
Sharp point - Blunt point
Vivid colors - Less vivid colors

Return displaced objects to their original positions.

Match colored cardboard figures as to shape, size, or color, as:
Triangle Square Circle Rectangle

Graduate sizes, from large to small.

Name missing objects from a group, as:
A child A toy A book A chair

Recognize colors:
Primary colors first
Secondary colors, as child gains knowledge of primary colors

Recognize and say the names of objects in the classroom:

Tables
Chairs
Windows
Teacher's desk
Chalkboard
Supplies
Rest boards
Easels
Toys
Games

As in other areas of physical and psychological development, it is possible for the teacher to do much to assist the child. The following suggestions are offered as a stimulus to the teacher's own creativity:

Provide materials necessary for matching of color, shape, size, and word form.

Provide experiences in units on weather, dairy, bakery, etc., which include opportunities to make comparisons.

Provide educational games and puzzles.

Repeatedly explain, demonstrate, and afford children the opportunity to observe and use left-to-right progression with:

- Picture books
- Bulletin boards
- Picture charts
- Experience records
- Calendars

STIMULATING COLOR DISCRIMINATION. Some suggestions for aiding pupils with normal vision in the development of color discrimination or sensitivity are:

Provide opportunity to use color to illustrate stories about school experiences.

Provide colored patterns which the child may match with yarn, paper, crayon, chalk, and paint.

Make available a box with duplicate buttons, yarns, pieces of cloth of many colors, paint chips, etc.

Prepare a large chart of plywood or chipboard, with roving or cord to connect the patterns.

STIMULATING THE DEVELOPMENT OF THE SENSE OF TASTE. The importance of the sense of taste is easily overlooked; however, games and activities may be devised to assist the pupils to:

Differentiate among:
Saline - Bitter
Sweet - Sour

Recognize tastes of various foods:

- Fruits
- Vegetables
- Nuts
- Desserts
- Cooked cereals
- Sandwiches

STIMULATING THE DEVELOPMENT OF THE SENSE OF SMELL. Olfactory sensations play a large part in the sensory training of children at all hours of the day. This sense may be developed by helping children to:

Recognize by odor and identify:

- Fruits
- Liquids
- Flowers
- Vegetables
- Food in lunch boxes
- Mints
- Flavorings
- Paste and glue
- Cosmetics, soaps
- Perfumes
- Spices

Experience and discuss daily changes in prevailing odors in the school garden, cafeteria, and classroom.

STIMULATING THE DEVELOPMENT OF THE SENSE OF TOUCH. This sense may be stimulated and trained by providing opportunities for pupils to:

Recognize various shapes of common objects, such as:
- Fruits
- Toys
- Dishes
- Furniture

Touch familiar objects with eyes closed or blindfolded, in order to develop recognition of articles, such as:
- Spoon
- Book
- Crayon
- Paint brush
- Pencil
- Doll

Recognize through the tactile sense, the difference between:
- Hard - Soft
- Rough - Smooth
- Warm - Cold
- Square - Round
- Large - Small
- Thick - Thin
- Wet - Dry

Identify the textures of various materials, such as:
- Wool
- Sandpaper
- Lace
- Smooth woods
- Cotton
- Silk
- Velvet
- Cleansing tissue

STIMULATING THE DEVELOPMENT OF THE SENSE OF WEIGHT. Sensory experimentation is of vital importance in developing discrimination in an evaluation of weight. This may be stimulated by providing opportunities for pupils to:

Handle objects of various weights, such as:
- Wooden blocks
- Cardboard boxes
- Cartons of food

Develop concepts of heavy and light

STIMULATING THE DEVELOPMENT OF THE SENSE OF TEMPERATURE. This sense may be stimulated by providing instruction which permits pupils to:

Feel differences between definite degrees of heat and cold

Watch the rise and fall of the thermometer reading at various times of the day

Observe changes in the form of water as it is frozen, as it thaws, and as the teacher demonstrates its conversion to steam

See the process of food expansion, as they observe cereals cooking in boiling water

STIMULATING THE DEVELOPMENT OF THE SENSE OF TIME. Pupils should be helped to:

Understand and use such terms as:
- Morning
- Noon
- School time
- Lunch time
- Afternoon
- Bedtime

Comprehend the meanings of:
- Days of the week
- Months of the year
- Holidays
- Seasons of the year

STIMULATING THE DEVELOPMENT OF THE SENSE OF VOLUME. Pupils should be helped to understand that groups or quantities may be divided into smaller units by activities such as the following:

Pour liquid from a pitcher to a cup.

Measure amounts for simple cooking.

Divide materials in smaller quantities.
- Construction materials and paper
- Food
- Other materials

Develop general concepts of amounts:
- More - Less
- Some - None
- All - Part

STIMULATING THE DEVELOPMENT OF THE SENSE OF PRESSURE. Help pupils to develop and verbalize concepts of pressure by including opportunities to:

- Dent a rubber ball
- Dent soft wood with a hammer
- Press head into a pillow
- Press hands in clay
- Press footprints in sand
- Flatten clothing, paper, and clay
- Pound wood, rubber, and soil
- Bend pipe stem cleaners, wire, soft metal, and tin foil
- Squeeze a rubber ball, toy, and fruit
- Stretch crepe paper and elastic

Other activities which may be adapted to the needs of the pre-compulsory pupil in the area of sensory development have been included in the Appendix under the headings of "Visual Discrimination" and "Auditory Discrimination."

In summary, sensory training activities, arising from the needs and activities of the pupils in the classroom, have two distinct values: they help to develop a discriminating use of the senses, and they stimulate oral expression.

STIMULATING THE PUPIL'S ASSOCIATION OF EXPERIENCES WITH SYMBOLS. Some pupils will need to be helped to realize that their experiences may be recorded in writing; some will need to learn that various kinds of information may be transmitted through symbols. Some suggested experiences which will help to develop this aspect of pupil growth are:

Taking walks and tours to associate common symbols with appropriate action or verbalization involving "STOP" signs, traffic signals, crosswalk designations, and the name of the school

Planning and building models of the school and community, with labels for homes, churches, schools, streets, and traffic signals

Using a model thermometer and other weather instruments

Using a weather chart (Pictures may be used until the pupils can read labels.)

Using a picture-type schedule of the daily program

Dictating letters of invitation and of appreciation

Observing price tags when trips to the market are taken or discussed

Pupils entering primary level EMR classes do not immediately participate in learning activities which are markedly different from their experiences in pre-compulsory classes. The transition from the very basic language-readiness activities to those which immediately precede formal reading instruction is a gradual one. Some pupils in the pre-compulsory classes may participate with profit in the preparation and use of experience charts.

APPROPRIATE TEACHING AND LEARNING ACTIVITIES IN PRIMARY, INTERMEDIATE, AND UPPER CLASSES FOR EDUCABLE MENTALLY RETARDED PUPILS

Individual differences, both in readiness to participate successfully in certain activities and in the quality of participation, are evident among pupils who enter primary EMR classes. Some pupils will be able to converse well about many subjects, while others may be unable to converse with the teacher or with other pupils for a significant period of time. This inability may be due to short attention span, to inadequate language skill, or to lack of fluency in English. Oral language activities normally associated with pre-compulsory classes will be appropriate for such children. Other activities described in the foregoing section will be of value.

GROUPING FOR READING INSTRUCTION

A fundamental problem which confronts teachers in every subject is how best to group pupils for instruction. Pupils with similar abilities and similar needs must be identified and instructed as a unit, if optimum use of teacher- and pupil-effort is to be realized.

The basic considerations for grouping for reading instruction are:

The level of language development possessed by the pupil

The level of reading instruction for which the pupil is ready

The language and/or reading skills the pupil possesses

The ability of the pupil to work as a member of an instructional group

Placing a child in a particular group on the basis of any one of these criteria is to ignore other bases on which reading instruction is predicated.

Some pupils who enter primary EMR classes will have developed a reasonable control over both the receptive and expressive areas of oral language. Practice in meaningful communication will have been received in the home or in the school. Other pupils will not possess oral language skills adequate for efficient instruction in reading. The responsibility for determining appropriate instruction lies primarily with the teacher.

One of the best means of identifying reading abilities and needs is to have each child, individually, and out of the hearing of other children in the group, read a series of selections from graded books with which he is unfamiliar. As he is reading aloud, the teacher observes:

The rhythm with which the child reads

The freedom he exhibits from evidences of tension

The total number of errors in terms of running words

The kinds of word recognition errors he demonstrates

The accuracy of his answers on both factual and inferential-type questions

His placement for group instruction and for assignment of independent materials may be determined on the bases discussed in "Levels of Reading Instruction."

Groups are not static. Formed around a core of common abilities and needs, the membership of the group changes as the result of growth. Because of the differences in the learning rate of the children, the groups will not be static, but will change, reflecting the adjusting abilities and needs of individuals and of the class.

LEVELS OF READING INSTRUCTION

To be truly meaningful and productive, reading must *challenge but not frustrate* the learner. These levels of reading, with appropriate criteria, are defined by Betts:[7]

Independent Level

100% word recognition and 100% comprehension

Instructional Level

98% word recognition and 75% comprehension

Reading at the independent and instructional levels is characterized by:

Rhythm
Lack of finger pointing
Lack of lip movement
Lack of excessive head movement
Good phrasing

Frustration Level

90% or less word recognition and 50% comprehension

At the frustration level these characteristics obtain:

Broken rhythm
Interrupted phrasing
Gross lip movement, finger pointing, and head movement

---

[7] Betts, *op. cit.*, p. 448.

SUGGESTED CLASSROOM MANAGEMENT OF THREE READING GROUPS AT THE PRIMARY, INTERMEDIATE, AND UPPER LEVELS

In the following chart are summarized suggestions for scheduling the reading program when three groups are used.

THE READING HOUR

	15 - 18 Minutes	15 - 18 Minutes	15 - 18 Minutes
Group II or III	Work with the teacher	Complete related follow-up activities	Work on guided independent activities
Group II or III	Work on guided independent activities	Work with the teacher	Complete related follow-up activities
Group I	Complete related follow-up activities	Work on guided independent activities	Work with the teacher

While the teacher is working with other reading groups, these activities are carried out by those not actually working with the teacher:

Related Follow-up Activities	Guided Independent Activities
Children work on materials developed or selected by the teacher to develop the skills taught in the current lesson or to strengthen skills previously introduced.	Children read library books or supplementary readers chosen by the teacher; they participate in listening or in other audio-visual activities; work at related reading aids; carry out related art activities; read or experiment in the science center.

It is imperative that pupils understand their assignments for related follow-up and for guided independent activities. Many teachers prefer to plan for the most proficient readers (Group I) to be the last reading group with which they work, for it has been learned that members of that group usually are more capable of sustained individual work and are better able to read and to remember instructions.

Most teachers of primary and upper EMR classes plan to spend about 60 minutes daily for instruction with the three reading groups. The short attention span of the retarded child appears to indicate that this total of 60 minutes (20 minutes with the teacher, 20 minutes in follow-up work, and 20 minutes in guided independent activities) is as much time as may be spent profitably in one continuous or related activity. The 15 to 18 minutes shown in the chart "The Reading Hour" provides for instruction, the making of assignments, and the mechanics of moving groups within a 60-minute period. Most teachers prefer to schedule reading instruction for the time before the first recess, capitalizing on the pupil's greater physical and mental alertness at that time in the school day.

IMPLICATIONS FOR READING OF THE CHARACTERISTICS OF THE MENTALLY RETARDED CHILD

Some of the characteristics of mentally retarded children have already been discussed. In the following paragraphs, some of the implications of these characteristics for the reading program are delineated.

SLOWER PACE. Mentally retarded children develop reading ability in much the same way as do normal children, but at a somewhat slower pace. This is true of their capability in word recognition, vocabulary, readiness, and the setting of purposes for reading.

To make new words a permanent part of the sight vocabulary, both deliberate introduction and repeated practice are important.

PRACTICE. The use of practice material is particularly important in teaching reading to the mentally retarded. This includes both exercises in word recognition and vocabulary and the use of many readers at the same level.

REVIEW AND DRILL. EMR pupils require much review of the basic words. This is achieved by rereading a selection several times for different purposes; by reading much material involving the same vocabulary; through meaningful follow-up exercises and activities; and by using word drill cards after the pupil demonstrates that he can recognize the words on which he is being drilled. Mentally retarded children, like other pupils, respond favorably to an enriched program using varied activities and different materials suited to their levels of comprehension.

Much experience and much guidance in exploring the visual and auditory characteristics of words should be assured. For word-recognition skills to operate effectively, they must be applicable to a wide variety of words. These skills are difficult for the retarded to acquire. Such children profit from additional drill in analyzing words and in learning the sounds of the different word elements. Flash card drills using known words can provide additional drill in word recognition.

DETAILED EXPLANATION. The retarded pupil must be given more detailed and simplified explanations, and he also must encounter simpler techniques. Frequently he finds the directions in teacher-made follow-up exercises or in workbooks difficult to grasp. The teacher must be sure that each child understands what is expected of him in all his assignments.

CONCRETE ILLUSTRATIONS. More concrete illustrations of the things about which he is reading are needed. In contrast with the average child, the mentally retarded pupil is handicapped in generalizing and in thinking about what he is reading. He should be given every opportunity to come into direct contact with the things about which he is studying.

SHORT-RANGE GOALS. Reading goals should be relatively short range and should be reached rather quickly. The pupil in classes for the mentally retarded does not work effectively upon projects of long duration.

ORAL REREADING. In instructing mentally retarded children, it is advisable to use more oral rereading than would be used in instructing average or above-average children. Many retarded pupils need to vocalize what they are reading before they can comprehend it well. The fact that vocalization slows the reading rate is of little significance with these children. If oral reading is carefully handled, it can become an effective means of aiding (1) in the development of more adequate oral language patterns, (2) in the development of effective silent reading, and (3) in evaluating the reading skills of the individual pupil. Oral reading always should be preceded by silent reading. This precept is altered only when using oral reading at sight to help determine reading instructional levels.

BUILDING A BACKGROUND OF EXPERIENCE

A rich background of experience is requisite to success in learning to read by either the experience approach or by the use of basal readers. The experience approach offers the opportunity for broader, more interesting content at the beginning level than does the basal reader approach only if the pupils have had experiences which stimulate them to think and to talk. Because of the impoverished experiential background of many pupils, the teacher will find it necessary to provide stimulating experiences, both personal and vicarious. Many of the experiences thus provided will serve both to stimulate discussion which may be used in the language experience approach and to develop readiness for the community-centered content of the initial basal readers.

School journeys or neighborhood walking trips provide desirable experiences. Through them, the pupil has an opportunity to observe the mailman, the fireman, and the policeman in action; he may see the many people involved in the distribution of food and building supplies; he may observe and discuss the activities which accompany the construction of homes, office or store buildings, and such civic improvements as storm drains, sewers, and roads and streets. Opportunity to internalize these experiences should be provided upon the return of the class to its room. Here, dramatic representation of the various activities may be undertaken, art activities may be used to help the pupils express their reactions to what they observed, and scrapbooks may be made from magazine materials or from the pupils' own art work.

APPROACHES TO THE TEACHING OF READING

The language-experience approach and the basal reader approach have much in common. Each helps to develop both a basic sight vocabulary and skill in the recognition of "new" words. Each provides for the use of a wide variety of reading materials, interrelating the total of the communication skills in and through the reading program, and helps to develop in pupils a desire to read.

The following comparisons[8] of the two approaches are provided to help teachers choose a means of teaching reading which offers them a challenge and a promise of success. Each of these techniques, consistently and appropriately used, will assist pupils in the development of reading skills.

---

[8] R. Van Allen, "The Language-Experience Approach to Reading Instruction," unpublished manuscript reproduced with permission by Division of Elementary Education, East Elementary District, Los Angeles City Schools, April, 1961.

LANGUAGE-EXPERIENCE	BASAL READER
SIGHT VOCABULARY	
Basic sight vocabulary is developed out of materials dictated or written by the pupils. The sequence is from oral language to written language to reading of the stories originally dictated or individually written. Some words appear with such frequency that pupils gradually gain control over words which are important to the development of reading skill.	Basic sight vocabulary is developed through reading selections in which a limited number of words are presented at any one time. In the reading material, the words are repeated a sufficient number of times for most children to learn to recognize the words at sight.
When individually written or dictated stories are used (as opposed to group-dictated), the vocabulary developed is a personal one.	All members of the class are introduced to the same words, since they are using the same materials of instruction.
WORD RECOGNITION SKILLS	
Word recognition skills, and particularly "phonics," are developed in a meaningful manner, since the pupil will have used orally every word which is recorded in the stories. Word recognition skills are thus the product of listening, speaking, reading, and (often) writing.	Word recognition instruction is integrated into the development of vocabulary, comprehension skills, and all of the other skills being taught from the basal reader. The sequence is one devised by the author, rather than stemming from the pupils' own attempts at communicating.
MATERIALS FOR READING	
Basic instructional material is developed by the pupil(s), reflecting their own real or vicarious experiences. The transfer of learning from reading their own materials to that prepared by other people has been repeatedly observed.	Reading materials are developed and used in a sequence moving from easy to difficult, as conceived by the author. Basal readers are so designed as to present a minimum of difficulty in moving from one instructional level to the other and to assure practice and drill on amounts ordinarily sufficient to insure retention.
Trade books, textbooks, and readers are used in great quantity. These ordinarily are selected by the pupil to meet his own needs.	Supplementary instructional materials are a desirable and necessary adjunct to the basal program. These may or may not be selected by the pupils as they define their own interests and needs.

LANGUAGE-EXPERIENCE (cont.)	BASAL READER (cont.)
INTEGRATION OF COMMUNICATION SKILLS	
In the language-experience approach, all communication skills--listening, speaking, reading, and writing--are most effectively integrated. This integration also occurs in instructional periods, in addition to those specifically allocated to the teaching of reading.	Instruction in the skills of reading receives special attention and time allocation. The total of the communication skills are not as effectively integrated as in the language-experience approach.
MOTIVATION FOR READING	
The child's oral language expression of his own experiences and thoughts strongly motivates him toward successful reading of this expression.	The teacher's skill in helping pupils to relate their own experiences to those depicted in the content of the readers motivates them toward achievement in reading.
CLASSROOM ORGANIZATION	
Classroom organization is focused upon the production and reading of materials which express the ideas and concerns of pupils comprising the class, both in the regularly assigned period for reading instruction and in the many other subject areas where children have ideas to record and communicate.	The classroom is so organized that it provides regular periods of reading instruction, including direct teaching and appropriate practice activities. Other communication skills ordinarily are taught at other times and are given attention during the reading period only as they are involved in the lesson situation.
EVALUATION OF PUPIL PROGRESS	
Pupil progress is based on mastery of the total of the communication skills, and not on reading alone.	Pupil progress is based on achievement in the skills of word recognition and comprehension of what has been read.

TEACHING CHILDREN TO READ BY THE LANGUAGE-EXPERIENCE APPROACH

The necessity for each teacher to have knowledge of the abilities and the needs of pupils, from the time they enter pre-compulsory classes until they leave the elementary school, cannot be over-emphasized. Of equal importance is knowledge of techniques for teaching reading which are appropriate for pupils of all levels of ability. Because the presence in any classroom of pupils of widely differing abilities and needs is assured, the need to use varying instructional procedures within each classroom also is certain.

Within any primary level classroom there will be pupils who continue to need a readiness program; also, there will be pupils who are ready for a more formal program of reading instruction; and there will be some few who already have grasped the rudimentary reading skills. The same range of abilities will be found in upper-level classes for the mentally retarded.

Appropriate activities to develop the many phases of reading readiness have been discussed in the preceding section, which relates to instruction in pre-compulsory classes for the mentally retarded. Also, many suggestions for activities to stimulate auditory and visual discrimination have been included in the Appendix.

One of the most important activities to be undertaken in the primary classroom is the development of the ability to associate the sound represented by a particular letter (a phoneme) with the letter itself (grapheme). The importance of this skill or ability in learning to read can hardly be overemphasized. Many examples of appropriate teaching and reinforcement activities are contained in Instructional Guide: Phonics and Other Word Perception Skills, Kindergarten Through Grade Six, and in teacher's manuals which accompany the various basal reader series.

SOME WAYS OF USING THE LANGUAGE-EXPERIENCE APPROACH. The experience story provides reading content which is of interest to pupils, since it is a record of their own experiences, and the content is in the vocabulary of the pupils themselves. It is a natural extension of earlier, less structured, and less difficult experiences, in which pupils have learned to read their names on labels for various items or, perhaps, have learned to read the days of the week on calendars in school. Some teachers may wish to extend the use of experience charts or stories, almost universally a part of beginning reading instruction, for teaching children who are successfully past the initial stages of reading. A later paragraph (p. 33) suggests ways of transferring from this approach to a desired basal reader. Other teachers may wish to supplement a basal program through using the language-experience approach. Still others may wish to use this approach for the development of materials in connection with social studies and other subject areas.

Heilman states that practice is provided within the language-experience approach in the following desirable areas:

> Oral language usage in the group planning prior to a trip and in recounting the experience, for chart building, after a trip
>
> The give-and-take of ideas as the experience is discussed
>
> Sharpening sensory acuity, particularly visual and auditory, while on excursions
>
> Expanding concepts and vocabulary
>
> Reinforcing the habit of reading from left to right
>
> Experience in learning words as wholes, thus building sight vocabulary
>
> Reading about one's own experiences, emphasizing that reading is getting meaning from printed words[9]

---

[9] Arthur W. Heilman, Principles and Practices of Teaching Reading (Columbus, Ohio: Merrill, 1961), p. 94.

Practice gained in any subject area which is used as the content of language-experience stories is still another advantage.

SUMMARY OF STEPS IN CHART PREPARATION AND USE. The steps taken by the teacher in chart production and use are summarized below:

Provides varied stimulating experiences

Leads class in discussion, evaluation, and planned extension of these experiences

Leads class into appreciation of continuing nature of these experiences

Records sentences dictated by pupils on chalkboard or on lined chart paper or newsprint

Prepares duplicated copies of the story for individual use, to be illustrated by the pupils and kept for reference

Rereads chart the following day, leading class into editing, if desirable. (Substitution for pupil's own vocabulary and structure should be done only in later stages of the experience approach.)

Prepares chart in final form, if editing has been done, using lined tagboard. (Illustrations may be used.)

Prepares duplicated copies of the story, if it has been edited

Prepares duplicate of the chart on lined sentence-strips

Provides related experiences, leading class into concepts of and practice in classifying, and prepares needed materials

Rereads related charts, questioning children on relationships

Varies the sequence of presentation, giving the class opportunity to develop and practice expression of the continuing nature of the experience recorded

Prepares follow-up activities of varying types:

Comprehension
Word recognition, including phonic and structural analysis
Vocabulary

Binds charts relating to a single experience in chipboard or heavy tagboard for use in library center

EXAMPLE OF EXPERIENCE STORY. The first major step in preparing experience charts (which will vary in length, according to the developmental level of the pupils) is the discussion which precedes a trip or which accompanies the sharing of a common experience, such as a television program all have seen. From this initial activity will come a chart, which might list the plans the group might be making for a trip to be taken. As the discussion proceeds, the teacher might write a summary statement (dictated by a child) on the board, or directly on newsprint or tag.

OUR WALK AROUND THE SCHOOL

We went for a walk around the school.

We went to the principal's office.

We went to see the nurse.

We went to the cafeteria.

We learned where the restrooms are.

As previously noted, summary statements dictated by the pupils are written on the chalkboard or on newsprint under the statement of the central theme or purpose which becomes the title of the chart. When the discussion has been completed, the teacher should read to the pupils the list of statements which represent their conclusions or decisions and are written in their own language.

If the story has been written on the chalkboard, it next will be transferred to large-size newsprint or to the tagboard. The following guidelines are offered for the physical preparation of the chart:

Leave at least three inches between lines on the charts first used with children.

Words on beginning charts should not be divided.

Ideas should be written in the phrases the pupils used in dictating the charts.

The left margin should be maintained, although the right margin will vary.

Illustrations, which are pupil made when possible, may be placed at either the top or bottom of the chart.

Letter forms should be those which are used in the handwriting program of the Los Angeles City Schools.

USING EXPERIENCE CHARTS IN THE READING GROUP. After the permanent chart has been made, it should be read with the pupils. This may occur on the same day the chart was dictated; but, more probably, it will occur on the following day. These steps may be followed:

The chart should be placed on a chart rack at the eye-level of the pupils in the class.

The story should be introduced by a brief review of the circumstances surrounding its dictation and writing.

The teacher should read through the chart, sweeping his hand from left to right along the lines of words. However, the sweeping movement need not be employed with pupils who have developed the appropriate left-to-right eye movements.

One or more pupils who have volunteered should then be asked to read sentences from the chart.

The chart next may be read as a whole by one or more pupils, reading individually.

The teacher should ask questions which can be answered by the reading of a phrase or sentence from the chart.

The chart may be edited cooperatively before being printed in final form.

The teacher may cut strips from a duplicate chart for the pupils to use in various types of follow-up activities or to use independently in matching these phrases with those on the permanent chart. The chart should be reviewed from time to time, with particular emphasis on sight recognition of those words which will have a high degree of utility in books which the pupil will use later.

The group soon will want to record things other than the direct experiences which were the subject matter of the earliest experience charts. Since this writing grows out of their day-to-day school experiences, only the curriculum limits the content. Pupil recording of information could develop from any of the following needs:

To record rules or standards agreed upon by the group

To outline projects, and list questions raised in a social studies unit

To keep a diary of interesting events

To explain centers of interest, and to give the steps of a construction activity or a science experiment

To invite speakers for a class activity or an individual or another class to a room program

To thank other persons who have rendered a special service; to label and describe objects in a classroom exhibit, and to record progress

The writing of individual stories, illustrated and bound into a personal book, is a valuable and stimulating activity. Because of the similarity of both experiences and vocabulary, these stories are easily read by other members of the class and provide additional independent reading material of high interest level.

VOCABULARY DEVELOPMENT AND CONTROL. One of the criticisms of the experience approach is that it does not provide for vocabulary control, either in repetition of words used or in use of words of high frequency. The teacher whose group is to go into a basal series and who is using the appropriate readiness books collaterally with the experience charts will have made a list of the words used in the pre-primers and in the primer of the series. Those words will be emphasized; and, in the editing period, the children will be lead to the use of those words as substitutes for the words they may have employed. Also, there is a "built-in" safeguard in that the words used by the children in dictating will be highly repetitious. Research indicates that a very small number of different words used in experience charts account for about 25 per cent of the total word count.

The teacher who plans to use the experience approach throughout the primary reading program and beyond will want to refer to some sources in selecting the words which will be emphasized in follow-up activities. Many of the words of the charts dictated and later written will have little or no future utility, and it is not important that these words be remembered. This selection may be based on a guide such as the first 500 words of the Gates Reading Vocabulary for the Primary Grades.

Words that have meaning to the child and those that are used throughout the total experience of children are words that are recognized with least difficulty and are most quickly added to their basic sight vocabulary.

The names of the people in the environment of a child are important to him because they play a very significant part in his everyday life. Therefore, nouns such as mother, father, baby, cat, dog, airplane, ball, and automobile are the most easily acquired as part of the sight-reading vocabulary.

The common verbs, such as run, jump, fly, eat, sing, make, swing, go, give, play, find, look, come, see, and many others which can be concretely illustrated, offer less difficulty than do such abstract verbs as was and were.

Children remember words when vivid sensory impressions and emotions are involved. For example, children who have seen or ridden in an airplane, fire truck, or scooter are interested in the printed symbols of these experiences. They are interested in the words describing the size, color, and motion of these things.

Connective words are usually the last to have meaning for children. Most pupils will experience some difficulty in remembering the connective words. Normal children who have a good language background will skip over these less meaningful words lightly, occasionally substituting a similar word, but gaining the thought through content. Many EMR pupils must have special help with these connective words before they can hope to do independent reading.

It is difficult to make vivid such words as from, and, for, are, was, have, has, here, where, put, her, his, at, left, they, and had. Such words are uninteresting to children when isolated from context, and may be confusing to them.

DEVELOPING WORD RECOGNITION SKILLS. Experience charts may be used from their earliest introduction for teaching word recognition skills. In the beginning, the teacher may do no more than call to the attention of the pupils consistent phoneme-grapheme relationships within a chart or among sentences on various charts. This soon may be expanded to follow the sequence of skills used in a basal reader series. Teacher's manuals of the major basal reader series contain such a list of skills. A more general list also is contained in the Los Angeles City Schools publication, Phonic and Other Word Perception Skills, Experimental, 1962.

TEACHING PUPILS TO READ BY THE BASAL READER APPROACH

As the use of experience charts continues, pupils will:

Exhibit desirable work habits

Evidence ability to sustain attention for a period of 15 to 20 minutes

Work cooperatively with other members of the class

Express their thoughts in complete sentences

Employ more than a strict subject-verb arrangement in expressing themselves

Move from the immediate and personal in their choice of subject matter to things not so intimately nor immediately concerned with them

Be able to listen to and comprehend materials discussed with them

There are similar, but additional, criteria for movement into pre-primers from reading readiness books used in conjunction with experience charts. Pupils will:

Read with ease the experience charts they dictate

Recognize the vocabulary of the pre-primers in both context and isolation

Use picture clues skillfully

Evidence positive attitudes toward reading, such as:
  Participating readily in pre-reading activities
  Participating readily in the story hour
  Looking with enjoyment at books in free time

The teacher who is using the experience approach as a readiness technique only will begin the transition to books when the pupil demonstrates control over the vocabulary of the pre-primers or primers to which he is to be introduced. This may be determined (1) by checking the pupil's ability to recognize the words in context by asking the pupil to read the charts individually, and (2) by preparing a list of the vocabulary of the experience charts and asking the pupil to pronounce the words. This may be done by masking the list with a slot to expose each word; by writing the words on separate cards; or by making a simple tachistoscope with two 3" x 5" cards, moving one of them to expose a word briefly, and then re-covering the word. In using this approach to reading instruction, the teacher must help the group to appreciate the sequential nature of reading. If the group, most of whom will have a chronological age greater than eight years, is to accept the necessary instruction from readiness books, they must be led to see the contribution these books can make to their progress and that these books, therefore, are important to them.

The manuals which accompany the basal series contain complete and detailed instruction for the use of the readers at each level. They also contain many valuable suggestions for the development of follow-up activities.

It is assumed that the teacher will continue to use the experience approach to maintain vocabulary already learned and to introduce and reinforce words used early in the basal series. Preparation for transition to the pre-primers has been discussed previously.

CHECKING RECOGNITION OF THE VOCABULARY OF THE PRE-PRIMERS. Before introducing the pre-primers to the reading group, the teacher should check the pupils' recognition of the vocabulary to be introduced in each of the pre-primers (or the first book of the series to be used by the reading group). Pupils should recognize no less than 95 per cent of the new vocabulary of a book the teacher plans to use. Word recognition may be verified by the technique discussed in paragraph 3, page 33.

If the pupil does not recognize 95 per cent of the new vocabulary, instruction in experience charts should be continued. During discussion and dictation of the charts by the pupils, the teacher should suggest repeatedly the vocabulary of the reader to which the pupils will move. This technique also is appropriate for determining when a pupil may profitably move from one reader in a series to the next. Specific criteria for this evaluation are discussed in the above paragraph.

THE DIRECTED READING LESSON. The goal of reading instruction is the development of the pupil's skills, abilities, and interests so that he will be able to gain information and pleasure through independent reading. Each phase of the directed reading lesson should contribute to the realization of this objective. It is recommended that the following steps be included in the directed reading lesson:

Motivation

Vocabulary introduction, review, and development

Guided silent reading

Oral rereading

Reading skill development

Follow-up or practice activities

Guided independent activities

Each of these steps is discussed briefly in the following paragraphs.

The purpose of motivation is to arouse the interest of the children in the content of the material to be read and to build the necessary conceptual background. It also is a time in which background may be built for the development of purposes for reading during the guided silent reading phase of the lesson.

Perhaps the major purpose of the second phase of the lesson is to introduce new vocabulary which the teacher believes may present a problem for one or more pupils during the silent reading phase. It also is a time in which previously learned words may be reviewed, and meanings may be extended.

Although new vocabulary generally is introduced within an oral context, some teachers successfully present the new words in sentences which are written on the chalkboard. Discussion of the words also is required with the latter method, to make certain that each pupil knows the pronunciations and the meanings of the new words.

Guided silent reading should be purposeful; it is a part of the teacher's responsibility to help pupils set purposes for reading each part of the selection.

Questions related to the brief discussion which occurred during the motivation may be used to help define a reason for reading the material. During the silent reading portion, the pupils have an opportunity to practice in a highly meaningful manner the skills of word recognition which they have learned; and here they have an opportunity also to reread when using context clues to the pronunciation and/or meaning of a word. They also develop both the skill and confidence necessary to successful oral reading.

Since the memory of mentally retarded children often is very limited, the questions which are developed to guide the silent reading should be related to relatively short portions of the selection to be read. Limiting the length of selections will assist pupils in remembering both the purpose for reading which they have established and the answers which they find. This limitation on length also is important when pupils are being helped to develop organizational skills.

Oral rereading should not precede silent reading, unless the pupil is being tested, as in the case of an informal reading inventory. Mentally retarded pupils appear to profit from rereading the entire selection, after the first silent reading has been completed.

Some of the purposes for this kind of oral reading are:

To convey meaning through the use of appropriate expression

To develop and practice correct pronunciation and phrasing, and to read with appropriate intonation, pitch, and volume

To appreciate and enjoy the material being read

To improve retention of content

To gain confidence and develop a feeling of success

The teacher has further opportunity to assess strengths and weaknesses and to more effectively diagnose the needs of the pupil through observation of the quality of the reading which occurs during this period. The importance of setting purposes which are understood by the pupils cannot be overestimated.

The skill development portion of the reading lesson is a very important element. Mentally retarded readers develop the skills which permit successful independent reading very slowly and need much more practice in all of the skill areas than do normal children. Because of this need for practice, only one skill should be emphasized in each lesson, and the practice material selected or developed by the teacher should relate to this skill. Skills which may be taught from materials which are at the pupil's instructional level include:

Comprehension

Word recognition

Vocabulary development

Reference skills

Organizational skills

The appropriate presentation of reading follow-up material is basic to its successful use. Purposes for the use of the material must be related specifically to the lesson for the day. The purposes and directions for working with the practice material should be understood by each child before he leaves the reading group, or before beginning work on the material. Each pupil should know how he may check on the accuracy of his responses, since immediate "feed-back" is known to improve retention of the skill being practiced. Materials to be used should provide for a maximum of reading at the independent level, and for a minimum of writing. The activities should consist of a number of items sufficient to keep pupils busy for the period assigned to this type of instruction. Assignment of supplementary activities should be clear, so that pupils who complete their work may move to another activity without disturbing others in their reading group. Above all, follow-up activity should be educationally sound and should contribute to the child's growth in language.

Guided independent activities should be related in some way to the reading process, but usually do not accompany a specific lesson in a basal reader. Activities involving the listening and viewing centers, science, or other educational aids and materials have been found to be successful.

Library books and supplementary readers may be used with great value in this way. It is important that a variety of books which are appropriate to the interests and independent reading levels of the pupils be available. Tape recorders also may be used with great benefit. Some ways in which this equipment may be used effectively are:

To record summaries of stories read

To record book discussions by groups of children

To record stories or plays which are read in "radio" fashion

APPENDIX

EXAMPLES OF ACTIVITIES FOR DEVELOPING SENSORY PERCEPTION AND DISCRIMINATION

A major goal in the education of mentally retarded pupils is to increase their ability to communicate in their environment. Communication in its broadest sense, both receptive and expressive, must be developed through all classroom activities, and must not be limited to instruction in the language arts. As sensory ability or skill is increased, so is the individual's awareness of his environment. This, in turn, increases the effectiveness of instruction and learning, since the interpretation and assimilation of instruction is based on individual experience.

Mentally retarded pupils need many and varied experiences in all sensory areas if they are to develop the ability to interpret the stimuli with which they are continually bombarded. Multi-sensory experiences are common; we see and hear, taste and smell, and touch and hear. We simultaneously may see crackling flames, hear the popping of the wood, and feel the warmth that flows from the fireplace. Planned experiences in which pupils at all levels have opportunity to feel, taste, smell, hear, and see, and manipulate--singly and in combination--and to enjoy all forms of sensory exploration are requisite to a functional curriculum.

The following excerpt from a California State Department of Education Bulletin summarizes the educational importance of sensory training:

> Since multiple handicaps are common in mentally retarded children, the curriculum must provide opportunities for developing the acuity of the senses--especially the visual, auditory, and kinesthetic senses--so that the mentally retarded pupil will be able to develop appropriate responses to a learning situation . . . Training the senses must be integrated to some degree in every activity. Activities to develop sensory discrimination must be included throughout the entire curriculum, kindergarten through high school.[10]

Pupils at all grade levels may profit from sensory training of various degrees of complexity. Training in sensory discrimination should proceed from the definite to the less definite: from vivid to less vivid colors, from loud to indistinct sounds, from strong to delicate odors, from distinct to delicate flavors, and from pronounced to slight touch sensations.

Sensory training activities should provide opportunity for the pupil to learn whether his responses are correct, thereby reinforcing the learning which occurs. Above all, these activities should be practical and have an evident relation to the pupil's daily activities.

VISUAL PERCEPTION AND DISCRIMINATION. The ability to discriminate among letter forms and word forms is fundamental to learning to read. Without the ability to discriminate among letter forms, effective reading cannot be a realistic expectation. Early letter confusion may be eliminated by exercises which will help the pupil to distinguish among differences, both great and small, in visual stimuli. The development of visual discrimination skills is one major purpose of reading readiness activities.

---

[10] "Programs for the Educable Mentally Retarded in California Public Schools," Bulletin of the California State Department of Education, XXXIV:1, (March, 1965), pp. 49-50.

The following are suggested activities which may be used directly or which simply may stimulate the teacher as she personalizes instruction. To be effective, their use in the classroom must be related to individual need and rate of growth.

Effective training in visual discrimination requires opportunity for the pupil to identify differences of varying degree among items, such as:

M M m M

jump bump

Practice materials should proceed from the concrete to the abstract and should be selected in terms of (1) desired outcome and (2) the specific needs of individual pupils. Examples of practical activities follow.

General Activities Relating to Contrast; Position; Shape, Color, and Size; and Visual Recall.

Recognizing visual contrasts, such as:

Large ball - Small ball
Wide ribbon - Narrow ribbon
Sharp point - Blunt point
Vivid colors - Less vivid colors

Returning displaced objects to their original positions

Matching colored cardboard figures as to shape, size, or color, such as:

- Triangle
- Square
- Circle
- Rectangle

Graduating sizes, from large to small

Naming missing objects from a group, as a child or a toy

Recognizing colors, beginning with the primary colors and moving toward the secondary colors, as the pupil develops in knowledge and skill

Recognizing and saying the names of such objects in a classroom as:

- Tables
- Chairs
- Teacher's desk
- Chalkboard
- Rest mats
- Easels
- Supplies
- Windows
- Toys
- Games

Bright Eyes. Place three or four articles on a table and cover them with a cloth. Uncover the articles for a short time while children study and observe them; then re-cover. Let one pupil recall one object, and then choose another child to recall another item.

What Did I See? Have one child describe an object in view in the classroom. Have the other children guess the name of the object.

What Did I Say? "Call" the names of different children by a silent lip message. Let children attempt to lip-read and interpret in order to be "it."

Variations:
Teacher gives simple commands.
Teacher makes simple statements.
Teacher asks easy questions.

What Is It Colored Like? Show the class a toy, a piece of cloth, or a paper of a certain color. Call upon one child to run lightly around the room and touch from one to three objects of the same color. Before beginning this game, be certain that there are many colored objects in view in the room so the children may find them successfully.

Variations:
Ask another child to follow after the first one has returned to his seat, touching the same objects in the same order. As the children's ability progresses, the number of objects to be touched may be increased gradually.

Good Morning. While the class pretends sleep, give a piece of colored paper or a cloth toy, book, or ball of yarn to a few children who are chosen to stand in front of the room. Use only the primary colors at first, until the children know them well. Ask the children who are "asleep" to awaken and look at the children in front and at the colors they hold, while the teacher counts to ten. Ask the children in front to place their colored items behind their backs. Choose a child from among those who "went to sleep." Have him call a child in the front, as: "Good morning, Mr. Green," or "Good morning, Miss White." If his color name is correct, the child called upon may answer, "Good morning, ________________. You are right."

Colored Ribbons. Have colored ribbons or tags of primary colors--red, yellow, or blue -- pinned on three children at the front of the class. The remainder of the class looks at and associates the colors of the ribbons with the children. The children return to their seats, remove the ribbons, and put them in their desks. The teacher calls upon class members to (1) name each child and identify the color of his ribbon and/ or (2) give each child's location in line as 1st, 2nd, or 3rd.

Where Were They? Start with two or three colored cubes or blocks on a table. Let the children observe the order of their position. The teacher then changes that order and the children replace them in correct position.

Variation:
Use unlike objects, such as:

Fruits	Words
Toys	Numbers
Flowers	

A Color Wheel That Spins. Color relation may be demonstrated by a spinning color wheel. From cardboard, cut a circle approximately four inches in diameter. Color it red, blue, and yellow. Begin with primary colors.

Punch two small holes in the center of the circle, as in a button. Thread the circle with twine about a yard long and tie the ends together. Roll the twine and pull it. As you pull it, the twine winds and unwinds in a purring rhythm and turns the color chart at the same time. When two or more colors are side by side on the spinning wheel, the colors appear to blend.

Color Spools, Cones, or Beads. Take large wooden spools, beads, or paper cones, and color them the primary colors. Have the children name the colors in their order of position.

Variations:

- Children name colors using terms 1st, 2nd, and last, as the first spool is read.
- Children name colors and use terms such as first, middle, and end, or right and left.

Lost. Select one member of the class to be the "policeman." Let him leave the room while a "lost" child is selected. Choose a "father" and a "mother." When the "policeman" is called back into the room, let him try to recognize the "lost" child from the description given by the "father" and "mother."

Variation:

- Select any object in the room, other than a child, for description and identification.

Hide the Thimble. Place a thimble in full view, but in an unexpected place, while one child is out of the room. When he returns, direct his hunting by clapping loudly when he approaches the thimble and softly when he goes away from it.

Observing Shape and Contour. Let the children trace the outline of an object chosen from a magazine picture. This outline is pinned to a board, and the children try to identify the object.

Matching Colors. Color matching also is a valuable readiness activity. Muffin tins or egg cartons which have one color in the bottom of each of the divisions are provided for each pupil or each small group. Pupils cut paper to place in the appropriate division, or place in it buttons or small toys which match the colors.

Variations:

- Pupils may prepare a chart or booklet with a color name, pasting into the booklet pictures of matching color.
- An 8½" x 11" sheet of paper for each pupil may be prepared with the color name on the top or bottom. Children may be instructed to cut a piece of that color from various pages in the magazine and to paste it on the sheet, either in a design or in free form.
- Each pupil will make a collage of various shades of one color. Paper may be folded into four boxes, to be used in conjunction with a chart which the teacher has made to be used as reference. The chart may contain the names of any desired

colors, with the names written in colored ink or with crayons. Pupils, according to their abilities, may be told to:

Make something in each square, according to the color indicated
Make a definite number of specific things in each square, according to the number and color indicated

Matching color patterns also helps prepare pupils for learning to read. For this activity, the following materials are needed: prepared patterns on small pieces of chipboard, colored wooden beads, shoe strings, and a container to hold the materials. The pupils place beads on the shoe string, according to indicated patterns, such as: three red dots, two blue dots, one orange dot, and three yellow dots.

Variations:
The complexity may be increased by providing more difficult patterns. For pupils who need drill in recognizing the names of colors, the patterns may be written, rather than being shown by crayon.

Classifying Objects by Size or Form. Visual perception may be developed by arranging pictures, shapes, or objects by size or form. Pictures of different animals or toys, things of different sizes, or cut-outs of shapes which differ in any of many possible ways, may be provided. Pupils then are asked to classify these in any of the many ways which may occur to the teacher.

Variation:
The teacher may provide pupils with duplicated sheets containing copies of some of the elements to be matched. Pupils may cut the shapes from one sheet and paste them next to a similar element or shape on another sheet of paper.

Matching Pictures. Visual discrimination may be developed by matching pictures which have been cut from old magazines or catalogs. It is suggested that letters or numbers be placed on the pairs of pictures so that each pupil may check his own work.

Matching pictures which tell stories when properly arranged contributes to the development of the ability to read. Mount several pictures, cutting them into separate frames. Pupils then arrange them so that they tell a story. The pictures may be numbered on the back, permitting self-checking.

Classifying Pictures. Classification of pictures provides valuable learnings. The teacher provides appropriate pictures and work papers which are headed with the following classifications: "animals - toys"; "work - play"; or "funny - pretty." The pupils may either place items on their working sheets and return them to envelopes after they have been checked by the teacher, or they may paste them onto their working paper, if the teacher desires.

AUDITORY PERCEPTION AND DISCRIMINATION. A person's ability to hear and to correctly interpret the sounds which surround him--speech, the noises of traffic, music, the songs of birds--are necessary if he is to understand his environment and the activities of which he is a part. Auditory perception and discrimination also have a direct relationship to reading instruction. Correct interpretation of speech sounds and the establishing of appropriate relationships between visual symbols (letters) and the sounds they represent are fundamental to an aural-oral approach to reading instruction.

Listening, the first of the language skills to develop, is basic to normal oral communication and, thus, to the act of reading. Learning to listen no more should be left to chance or to incidental development than should learning to read.

The ability to perceive and to discriminate among sounds will vary among individuals. Some pupils may need practice of a particular type which, for others, would be inappropriate. Identification of individual needs and of individual rates of growth is as necessary in helping pupils learn to interpret their environment through listening as in any other learning activity.

General Activities Relating to Commonplace Sounds; to Near and Distant Sounds; and to Various Rhythmic Patterns

Recognizing common sounds heard in the classroom

Recognizing voices of classmates

Discriminating between distant and near sounds

Differentiating rhythmic pattern sounds:

Fast - Slow	Skip - Walk
Loud - Soft	Run -- Hop

What Did It? While the children pretend to sleep, the teacher or a child chosen from the class will strike objects in the room that make different sounds, such as wood, tin, iron, or empty or filled boxes. When the children "awaken," let them tell what has been heard.

What Sound Did I Hear? Ask one child to come to the front of the room while the others pretend to sleep. Have him make a distinctive sound: ring a bell, scrape a chair, sing a few notes, or tap the table with a ruler. Let the children "awaken" and identify the sound heard.

Where's the Clock? Hide a small, loud-ticking clock somewhere in the room, while the children are "asleep." When they awaken, ask them to listen and tell where the clock is hidden.

What Do I Hear? Sound different items: a cow bell, bicycle bell, tin horn, sleigh bell, drum toy, or pitch pipe. Children close their eyes and identify the articles by sound.

What's the Song? The teacher taps the rhythm of some familiar song, and the children guess the song title.

Guess. Have one child stand behind a screen and shake a rattle, turn an egg beater, sweep with a broom, clap hands, crush a piece of paper, pour water into a pan, blow a horn, hammer a nail, or ring a bell. The other children guess by the sound what is being done.

Auditory Skills. Let the children march to music, accenting when the music is loud, tiptoeing quietly when the music is soft.

Animal Blindman's Bluff. The players form a circle. Someone is chosen to be "it." He is blindfolded and takes his position in the center of the circle. All the other players are animal actors. The teacher or leader secretly assigns to each player the part of an animal, such as a dog, cat, lion, hen, rooster, pony, or mouse. The player who is "it" attempts to identify the animal sound. If he identifies the sound correctly, he becomes an "animal actor," and the actor who is identified becomes "it."

Echo. The pronunciation of difficult words may be facilitated by playing "Echo." The teacher pronounces a word, and a pupil pretends that he is an echo and repeats the word. While the opportunity to be "Echo" passes from pupil to pupil, it is important that a good example of pronunciation be provided; hence, it is wise for the teacher to pronounce every word. The "old" Echo may whisper a word to the teacher, who pronounces it aloud to the "new" one.

Variations:
- All kinds of phonetic elements may be used instead of difficult words.
- These activities may be tape recorded and played back for a group evaluation of how well the words were pronounced or how accurately the phonetic elements were reproduced or defined.

Other valuable suggestions may be found in Speech in the Elementary School, Los Angeles City Schools, Publication No. 479.

Identification of Rhyming Sounds. The ability to hear or recognize rhyming sounds may be taught through using several sets of large pictures of objects whose names rhyme: examples are man-fan-can; cat-bat-hat; pearl-girl-curl. These pictures should be mounted on tagboard or prepared for use on a flannel board. Two or three sets may be placed neatly on the chalk ledge or flannel board, with the oral statement that "Some of these things have names that rhyme. Who can find pictures of two things whose names rhyme? Can you think of any other words that rhyme with the pictures which you have selected?" This activity may be concluded with a favorite jingle or with pupils telling which are the rhyming words.

Variations:
- Use toys or real objects with names that rhyme.
- Match pictures with words, in a later stage in the pupil's development.
- Match rhyming words as a later-stage activity.

Discriminating Among Non-language Sounds. Pupils may be asked to:

Close their eyes and listen for such sounds as the singing of birds and the rustling of leaves

Identify sounds within the environment, such as trucks going by, trains whistling, the playground being swept or raked

Listen for high and low, and soft and loud sounds

Identify the sources of sounds, such as a pencil sharpener, a bell in the back of the classroom, a ball being bounced on the floor, the movement of chalk on the board

Discriminating Among Language Sounds. Pupils may be asked to:

Identify the voice of a speaker, of a singer, and of teachers whom they know

Identify the character in a story from the tone of voice used by the reader or teller

TACTILE PERCEPTION AND DISCRIMINATION. Learning to differentiate among objects through the sense of touch alone helps pupils to become aware of the importance of this sense and of the contribution it can make toward understanding of the world around them.

General Activities Relating to Form, Texture, and Other Elements

Recognizing various shapes of common objects, such as:

- Fruits
- Toys
- Dishes
- Other common objects

Touching familiar objects, with eyes closed or blindfolded, in order to develop tactile recognition of articles:

- Spoon
- Book
- Crayon
- Pencil
- Doll
- Paint brush

Recognizing the differences between:

- Hard - Soft
- Rough - Smooth
- Warm - Cold
- Square - Round
- Large - Small
- Thick - Thin
- Wet - Dry

Identifying various textures:

- Wool
- Sandpaper
- Lace
- Smooth woods
- Cotton
- Silk
- Velvet
- Cleansing tissue

Grab Bag Games. Put several different but familiar items in a bag. Each child feels and identifies one or more. Include such familiar classroom items as toys, small balls, marbles, or beads, and have the children reach into the bag and identify them through the sense of touch.

Progressive Game. Call one child to the front of the room and ask him to touch something and name it as he touches it. Let him call a second child to the front of the room before he returns to his seat. The second child touches the object that the first child touched and says, "____________ touched the table, ____________ touched the chair, ____________ touched the wall."

Variation:

Call one child to the front of the room, asking him to touch something. He then calls a second child to the front and says, "Touch what I touched and touch one thing more." This process is repeated until the series is broken, when it begins with a new child who is chosen by the one who broke the series.

OLFACTORY PERCEPTION AND DISCRIMINATION. New avenues of appreciation and learning may be opened up to the child through his sense of smell.

Recognizing commonplace objects, such as:

Fruits
Liquids
Flowers
Vegetables
Food in lunch boxes
Mints
Flavorings
Paste and glue
Cosmetics and soaps
Spices

Grab Bag. The teacher conceals a fragrant or pungent item, such as a bar of soap, flower petals, crushed leaves, or freshly cut lemon, in a paper bag. Children try to identify the enclosed item through the sense of smell.

What Do You Smell? Allow children to smell a well-concealed, strongly-scented object, such as an onion. Let them whisper to the teacher the object smelled. The winner may choose the next game. The teacher may start with strongly-scented objects and go on to less distinctive smells as the children progress in their ability to discriminate.

What Is It? Pass a box with soap, or a fragrant but familiar flower, or a spicy fruit around the class. Children keep their eyes closed and identify silently until everyone has had a turn. The teacher then chooses a child to name the fruit or flower.

What Did We Smell? Take a walk around the school buildings, grounds, and cafeteria. On returning to the classroom, recall as many of the odors experienced as possible.

GUSTATORY PERCEPTION AND DISCRIMINATION. Since the relation of taste to the skills which are normally associated with school activities is not easily observable, the importance of developing this sense--and the school's responsibility to participate in its development--may easily be overlooked. However, opportunities should be provided for pupils to taste, describe, and differentiate among many different kinds of foods.

Recognizing various tastes through such activities as:

I Taste Something. Children are asked to distinguish between primary tastes by naming three foods that are salty, sweet, sour, or bitter; describe tastes and textures of different foods; and, with their eyes closed, taste items and identify them.

Lemonade. Each child is given a section of lemon to taste. He is allowed to squeeze the lemon into a cup, add a favorite taste--sugar--and then stir in water to make lemonade.

EXAMPLES OF READING FOLLOW-UP ACTIVITIES

The directed reading lesson should emphasize the reading of appropriate material and the introduction of specific skills. Practice material (follow-up activities) provide the practice necessary to make these skills functional and assure their retention. The suggestions which follow apply to all kinds of written follow-up or practice material.

Reading skills which are emphasized both during the reading lesson and in practice materials are listed in the Course of Study for Elementary Schools. Briefly summarized, they are:

Word Perception Skills:

- Contextual clues
- Configuration clues
- Phonetic analysis
- Structural analysis

Vocabulary Development

Reference Skills

Organizational Skills

The teacher also is obligated to help every pupil develop to the limit of his potential his ability to:

Read for information

Read for pleasure

Care for books and other reading material

The following guidelines for the preparation and use of written practice materials have been found to be helpful:

1. Present one skill at a time and repeat the practice lessons as many times as needed.

2. When a new form of practice material is introduced, give adequate opportunity for children to become familiar with what they are to do in order that they may be successful.

3. Avoid asking pupils to color small pictures.

4. There should be enough items to keep the child busy. Although the problems presented by items should challenge his thinking, they also should be within the range of what he can do successfully.

5. Library books or reading aids should be available for children who finish before the end of the assigned practice period.

6. If the use of workbook material is planned, observe the following principles:

   Include one concept per lesson.

   Divide lessons into small sections, if necessary, since workbooks have been prepared for average children who generally can cope with more material than EMR children.

   Exercise teacher-judgment in selecting material from workbook because of the limited abilities of most retarded pupils.

Standards for preparing written practice lessons include:

1. Reading skill being emphasized must have been taught previously.

2. Lessons should require a maximum of reading and a minimum of writing.

3. Duplicated sheets should be prepared carefully.

   The use of duplicated sheets is recommended because retarded children do their best when their work is in front of them and they do not have the distraction of copying from the board.

   Duplicated sheets should be correct, clear, and legible.

   Ample space for the name and date should be included; purpose and direction should be included.

4. Directions should be simple and concise. Use only familiar vocabulary in written directions.

Activities for very immature readers who are not yet capable of working with traditional types of written follow-up work might include:

1. Fold large newsprint in four sections. With black crayon, write in manuscript a single phrase in each section; i.e., baby doll, funny duck, or whatever is appropriate for the text of the lesson. Children illustrate.

2. Give each child a sheet of newsprint with a sentence written in manuscript, using the child's name and including a word or words from the lesson, or words with which the child is having difficulty. Child will illustrate; for example, "Maria wants to help Mother."

3. Fold newsprint in half. Label the two halves "big" and "little." Have child go through magazines to find pictures of big and little cars, people, airplanes, boxes, etc., and paste them in appropirate place, always in corresponding pairs.

4. Make a consonant scrapbook. The teacher prints the consonants, and the children work with one letter at a sitting, using magazine pictures to illustrate the various initial consonant sounds.

5. Provide sheets with words to be studied. Children are to cut out and paste words in their proper columns.

Tip	Janet	plays	runs
Janet	plays	runs	Tip
runs	Tip	plays	Janet

(etc.)

6. Provide children with duplicated sheets, using the primary typewriter or manuscript written with black crayon. Children are to read the sentences; then, draw a happy face, if the sentence is a good or true one, or a sad face, if the sentence is not complete or does not make sense.

Mother is home.

Janet can see Tip.

Look at the fast.

(etc.)

7. Provide children with duplicated sheets on which sentences have been written with the primary typewriter or in manuscript. Children are to make a picture to complete the rhyme.

Look in the house.

Find a little ____________.

Look, Tom, look.

See my big ____________.

8. Take direct discourse from the lesson and prepare duplicated sheets. Children are to underline who said it and write the page number.

"Go and find your ball."   Jack   Janet   Page _____

"Mitten, come here."   Jack   Janet   Page _____

(etc.)

9. Repetition of these exercises and variations of them will help establish a child's readiness for more conventional types of follow-up work.

Sample activities that correlate with the Houghton Mifflin basal reader series, 3rd Edition, are presented on the following pages.

JACK AND JANET

"The Little Goat" (68-69)

NAME ______________________________ DATE ________________

Purpose: Location skills - finding the page and line

Directions: Read each sentence. Find the page and the line number of each sentence.

1. "Come and see what I see." Page ________ Line ________

2. "A little goat," said Mother. Page ________ Line ________

3. "Where is he?" Page ________ Line ________

4. "May I have him?" asked Jack. Page ________ Line ________

5. "We will have to find it." Page ________ Line ________

(Continue until the desired number of items is reached.)

JACK AND JANET

"The Little Goat" (68-69)

NAME ________________________________ DATE ______________

Purpose: Vocabulary development - dictionary skills

Directions: Read each list of words. Write the words in alphabetical order.

did comes eat a ball	good has Jack it for
1. ____________	1. ____________
2. ____________	2. ____________
3. ____________	3. ____________
4. ____________	4. ____________
5. ____________	5. ____________

(Continue until the desired number of items is reached. Be sure to group words so that children can meet a degree of success until they become more skilled in the alphabet and better able to use the dictionary.)

JACK AND JANET

"The Little Goat" (70-72)

NAME ______________________________ DATE ________________

Purpose: Word recognition skills - structural analysis (reinforcement of previously learned words)

Directions: Make new words by adding these endings to each root word.

	s	ed	ing
1. ask			
2. help			
3. look			
4. call			
5. play			

(Continue until the desired number of items is reached.)

JACK AND JANET

"The Little Goat" (70-72)

NAME ______________________________ DATE ____________________

Purpose: Comprehension skills

Directions: Read each group of words. Rearrange the words in each group to make a good sentence. Use capital letters where needed.

1. goat you a bad are

____

2. this get and come

____

3. for him get I will something

____

4. goat is this little a for

____

5. will we it have to find

____

(Continue until the desired number of items is reached.)

JACK AND JANET

"The Little Goat" (68-72, review lesson)

NAME ________________________________ DATE ____________________

Purpose: Location skills - rereading to find specific sentences

Directions: Reread the story. Find the correct word to go in the blank spaces. The page numbers will help you.

1. "______________________ do you see?" asked Mother. (page 68)

2. "Mother, may I ____________ him?" asked Jack. (page 69)

3. Mother said, "I will get ____________ for him to eat." (page 70)

4. Jack said, "You are a ___________ goat." (page 71)

5. "Is he your goat?" asked Janet. "No, he is not _________," said Jack. (page 72)

(Continue until the desired number of items is reached.)

JACK AND JANET

"The Little Goat" (68-72, review lesson)

NAME ______________________________ DATE ____________________

Purpose: Comprehension - inference (low level)

Directions: Reread the story. Read the sentences. Think of the meaning. Then fill in the blanks. The page numbers will help you.

1. Jack said, "I see a little ________________." (page 68)

2. "May I have him, ____________?" asked Jack. (page 68)

3. "No, Jack," said Mother. "He has a ___________." (page 69)

4. Mother said, "I will get ______________ for him to eat." (page 70)

5. Jack said, "You are a bad goat. That is not for you to ____________." (page 71)

(Continue until the desired number of items is reached.)

UP AND AWAY

"Jack Rabbit and the Hiccups" (28-29)

NAME ______________________________ DATE ________________

Purpose: Comprehension - recalling details

Directions: Read each sentence. Complete the sentence correctly.

1. "I laughed and I ran around," said ______________________________
Mrs. Ostrich Jack

2. "The hiccups never did go away," said ______________________________
Mrs. Ostrich Jack

3. "Then put your head in the sand," said ______________________________
Mrs. Ostrich Jack

4. "Count three," said ______________________
Mrs. Ostrich Jack

5. "This will never do," said ______________________
Mrs. Ostrich Jack

(Continue until the desired number of items is reached.)

UP AND AWAY

"Jack Rabbit and the Hiccups" (28-29)

NAME ______________________________ DATE ____________________

Purpose: Word recognition - phonetic analysis

Directions: Complete the sentence correctly.

1. ______________________ do I hear?
   That What

2. Did you hear ______________________ sound?
   what that

3. I could hear it ______________________ I stood still.
   when than

4. I do not know ______________________ it could be.
   that what

5. ______________________ did it come from?
   There Where

(Continue until the desired number of items is reached.)

UP AND AWAY

"Can the Kangaroos Help?" (30-33)

NAME ______________________________ DATE ______________

Purpose: Comprehension - rereading for meaning

Directions: Read the lines on the left side of the paper. Then, read the lines on the right side of the paper. Can you fit the right parts together? Draw lines to show which parts go together.

1. The rabbit could	not very funny.
2. Hiccups are	to help Jack Rabbit.
3. Red Calf laughed	his head in the sand.
4. Mrs. Ostrich wanted	stand on his head.
5. Jack Rabbit put	how to count to three?
6. Do you know	at Jack Rabbit.

(If more items are desired, it would be well to make a dividing line so that pupils would not be confused by too many items.)

UP AND AWAY

"Can the Kangaroos Help?" (30-33)

NAME ________________________________ DATE ____________________

Purpose: Comprehension - selecting details

Directions: Read the sentences. Draw a line under the word that will make the sentence correct.

1. Jack Rabbit was not

   sad happy jumping talking

2. Mother Kangaroo puts me into her

   bag hand pocket jump

3. It was very

   cold hot rainy

4. Jack Rabbit was not happy so he

   laughed sang jumped cried

5. Jack Rabbit wanted to get rid of his

   cold hiccups pain cough

(Continue until the desired number of items is reached.)

UP AND AWAY

"Can the Kangaroos Help?" (30-33)

NAME ________________________________ DATE ____________________

Purpose: Comprehension - selecting details

Directions: Read the sentences. Draw a line under the word that will make the sentence correct.

1. Jack Rabbit was not

   sad happy jumping talking

2. Mother Kangaroo puts me into her

   bag hand pocket jump

3. It was very

   cold hot rainy

4. Jack Rabbit was not happy so he

   laughed sang jumped cried

5. Jack Rabbit wanted to get rid of his

   cold hiccups pain cough

(Continue until the desired number of items is reached.)

UP AND AWAY

"Jack Rabbit and the Hiccups" (29-33, review lesson)

NAME ______________________________ DATE ________________

Purpose: Word recognition - sound and context clues

Directions: Read the questions. Answer the questions with yes or no in each blank.

1. Could a little bunny be funny? ________

2. Is it light at night? ________

3. Could a mouse be in a house? ________

4. Does a dog look like a log? ________

5. Can you look at a book? ________

(Continue until the desired number of items is reached.)

COME ALONG

"The Story That Was Too Big" (24-27)

NAME ____ DATE ______________________

Purpose: Location skills - use of the Table of Contents

Directions: Read the questions. Use the Table of Contents to answer the questions.

1. On what page does the story about "Curious George" begin? Page ______

2. On what page does another story about animals begin? Page ______

3. Where would you find a story about a Traffic Policeman? Page ______

4. On what page does the section "Open Roads" begin? Page ______

5. Where would you find a story about toys? Page ______

(Continue until the desired number of items is reached.)

COME ALONG

"The Story That Was Too Big" (24-27)

NAME ______________________________ DATE ____________________

Purpose: Word recognition skills - phonetic analysis

Directions: There are two words on each line that rhyme. Read each line silently. Cross out the word on each line that does not rhyme.

1. let by get
2. is sit it
3. big pig bad
4. eat hear heat
5. say said gray

(Continue until the desired number of items is reached.)

COME ALONG

"The Story That Was Too Big" (24-27)

NAME ______________________________ DATE ____________________

Purpose: Vocabulary development - classifying words

Directions: In this story, we have read about some people and some animals. Study the words in the box. Write each word in the box under its correct title.

Tommy
mother
purple dog
calf
uncle
elephant
Uncle Jack
cow
daddy

PEOPLE	ANIMALS
______________________	______________________
______________________	______________________
______________________	______________________

(etc.)

COME ALONG

"The Story That Was Too Big" (24-27)

NAME ______________________________ DATE ____________________

Purpose: Comprehension skills - rereading to verify

Directions: Read each sentence. Write true in the blank if the sentence is true. Write false in the blank if the sentence is not true.

1. Tommy Ball liked to tell stories. ____________________

2. Tommy's father laughed about his stories. ____________________

3. His mother laughed, too. ____________________

4. Uncle Jack never believed Tommy's stories. ____________________

5. Tommy told about a dog that was as big as a calf. ____________________

(Continue until the desired number of items is reached.)

LOOKING AHEAD

"The Trolley Car Family" (18-22)

NAME ______________________________ DATE ________________

Purpose: Word recognition and comprehension skills - practice in recognizing words out of context and using meanings of words to place them in certain categories

Directions: Read the words in each line. Cross out the word that does not belong with the other words on each line.

1. run walk jump thing
2. horse house dog cat
3. dollar nickel queer penny
4. milk butter wood cream
5. fireman children policeman postman

(Continue until the desired number of items is reached.)

LOOKING AHEAD

"The Trolley Car Family" (18-22)

NAME ______________________________ DATE ____________________

Purpose: Comprehension skills - rereading to verify

Directions: Read each sentence to find out whether it is true or false. Write true or false after each sentence.

1. Mr. Jefferson lived alone. ________________
2. He was cross because he did not like his job. ________________
3. He wanted Whitey and Blacky to go on a picnic. ________________
4. Mr. Parker drove a trolley car. ________________
5. Mr. and Mrs. Parker had four children. ________________

(Continue until the desired number of items is reached.)

LOOKING AHEAD

"The Trolley Car Family" (18-22)

NAME ______________________________ DATE ________________

Purpose: Comprehension skills - drawing conclusions

Directions: Read each paragraph below. Draw a line under the right answer to each question.

1. There was a big truck in front of Brown's door. Men were putting chairs and tables and trunks into the truck. What do you think the Brown family must have been doing?

   having breakfast

   going on a picnic

   moving to another house

2. When Mr. Bills works at his job, he wears a blue cap. All day he drives around the city. He takes people to work, to school, and to the stores. What is Mr. Bills' job?

   a truck driver

   a milkman

   a bus driver

3. At Mr. Wilson's store you can buy coffee, bread, apples, oranges, sugar, and many other things to eat. What kind of store does Mr. Wilson have?

   a paper store

   a grocery store

   a feed store

(Continue until the desired number of items is reached.)

EXAMPLES OF PRACTICE MATERIALS AND ACTIVITIES

Continuing practice in all of the skills of reading is fundamental to the development of an independent reader. The short memory span and the limited capacity of the mentally retarded pupil make practice even more important to him than to the average pupil.

The activities described in this section are valuable in providing practice in many different ways. These activities do not relate to a particular lesson, but have a continuing application. Their value, as is true of all practice material, depends in great part upon the identification of a specific need and the selection of a practice activity which will meet that need.

It is important to use educational aids and games in the education of the mentally retarded pupil because they provide:

Specific drill to meet an individual need in the reading instructional program

Additional motivation for practice

Opportunity to develop independent work habits

A change of pace, which reduces fatigue

The following guidelines for the use and construction of practice materials are suggested:

Practice materials should be used only when a specific need of the individual pupil or group has been determined through observation of his reading habits and abilities, and, where practical, should be self-checking.

Practice should be provided after the skill or technique has been introduced by the teacher and before a related skill of a higher order is introduced.

The practice materials should be introduced carefully. Only one kind of material should be introduced at a time, and directions for the use of the material should be carefully taught.

Standards for care of materials should be taught. Pupils should know how to use the materials properly, under what conditions they may be used, and how to store them properly.

Materials should be used only as long as they meet a specific need. Later, they may be reintroduced, for reinforcement.

Practice activities should be constructed of sturdy materials so that they will be useful over a relatively long period of time.

Lettering, cutting, gluing, and other aspects of construction should be of high quality.

Lettering or typing should be distinct; manuscript lettering and/or primary or kindergarten typewriters are recommended.

MANIPULATIVE PRACTICE ACTIVITIES AND EDUCATIONAL AIDS. Practice activities of this type are valuable as a supplement to the reading program because they provide a different kind of reinforcement to the initial stimuli. The inclusion of even slight physical activity (as in arranging pictures, using a spinner, etc.) provides a welcome change in the kind of performance which usually accompanies reading instruction.

Classifying Objects by Size or Form. Visual perception may be developed by arranging pictures, shapes, or objects by size or form. Pictures of different animals or toys, things of different sizes, or cut-outs of shapes which differ in any of many possible ways, may be provided. Pupils then are asked to classify these in any of the many ways which may occur to the teacher.

Variation:

The teacher may provide pupils with duplicated sheets containing copies of some of the elements to be matched. Pupils may cut the shapes from one sheet and paste them next to a similar element or shape on another sheet of paper.

Words and Objects. The teacher may prepare a practice sheet containing pictures and words which appear in the pupil's picture dictionary. The teacher lists only the initial letter or letters which represent a sound, rather than the entire word. The pupil, using each picture and initial letter as clues, searches for the word in his picture dictionary; when he finds the word, he writes it on a line provided on the practice page. It is important that only words which are in the pupil's independent reading vocabulary be used in this review exercise.

Another sight-word drill involves objects and word or name cards. One of the children or the teacher places a number of objects on a table, with cards bearing the names of the objects placed on the chalkboard tray. A child removes a name from the chalkboard and the object from the table.

Variation:

This may be done with pictures, rather than objects. Pictures may be put on cards which, with cards bearing the names of the pictures, have been prepared for flannel board use. The child puts both the picture and the name card on the flannel board. This may be varied by giving each child in the game an equal number of pictures and having the children take turns putting them on the flannel board.

Words only: Words from the pupil's sight vocabulary may be duplicated for practice. Words listed on the lower half of the page are to be cut out, matched with words at the top of the sheet, and pasted beside them.

Variation:

Pupils may illustrate words which are appropriate.

Sentences found either in the current experience chart or in one which the child has had in the past may be typed or written on pieces of heavy paper and cut into phrases which then may be matched and rearranged in their original order. Identifying symbols may be placed on the back so that the child may check his own work.

Variation:

Print or write the first phrase on heavy tagboard. Below the line along which the second phrase would go, place reinforcements or index tabs to hold the strip of paper bearing the rest of the sentence.

Example:

Tom went ___________ bread and milk.

His sister ___________ to the store.

They bought ___________ went, too.

Pupils match the appropriate phrases. The complete chart should be made available to them for reference.

Children may dictate sentences using words the teacher has helped them identify as needing reinforcement. These may be organized in any of the above ways.

Word cards may be drawn from a stack placed face down on a table. Pupils take turns drawing cards and reading them. If a card is misread, it is returned to the bottom of the pack. The child who retains the most cards when the stack is completed is the winner.

An individual word-study book may be valuable for some pupils. Lined paper cut in half the 11" way may be stapled together, inside a cover of the pupil's own design. On the cover may be printed "Words I Know." The teacher may write a needed word at the top of the sheet, and the pupil then finds the word in a story. He copies the sentence in which the word appears, also writing a sentence of his own composition. It is important that the teacher verify accuracy later, and ensure correction.

An individual word-study envelope provides an opportunity for the pupil to study alone. An envelope is made, and a window is cut from the envelope (½" x 2 ½") through which words may be read. The teacher copies words in manuscript which the pupil has learned to read in experience charts or from a basal reader. The window makes it possible for the pupil to concentrate on one word at a time.

Letter Sound Discrimination. List in a column about 15 numbered groups of letter sounds. (For the very low-level reading group, these should be very different sounds, so that confusion from similarity will not be introduced.) The teacher pronounces a word beginning (or ending) with one of these letters, which the group circles. When the group has completed the exercise, the teacher:

Asks a child what letter he circled in group number ______

Repeats the stimulus word after the correct answer has been obtained

Asks the group to provide a word with the same initial sound

NAME ______________________________ DATE ____________________

1. b k x y

2. k l h f

3. o d y f

(etc.)

9. k l w f

10. v o l x

11. o d w k

(etc.)

Variation:

This may be adapted to a Bingo-type game. A series of words may be dictated, each beginning with the same sound. The child writes the letter representing the sound. This may be adapted to medial or final sounds.

General Sound Discrimination. A duplicated list of words with the initial phonetic element missing may be provided. The teacher pronounces two words, one of which is grossly unsuitable. From this oral stimulus, the child supplies the correct letter or group of letters. To check this exercise, the correct word should be written on the chalkboard after each word or each very small group of words is pronounced.

EDUCATIONAL GAMES. A number of games which reinforce the skills which have been developed initially in the reading lesson are described below. As in all practice activities, these should be used only to meet a specific need; and their use should be discontinued either when the need has been met or when it is obvious that the return from the practice is not commensurate with the time and effort being expended. These may be used as small-group or independent activities.

Letter Bingo. This game may be used to help develop familiarity with letter names and forms. Divide large squares of chipboard into 16 squares each, printing a capital letter in each square. Use the same letters on all cards, but place them differently. Prepare small cards with one letter on a card, again using all the same letters. Use the same rules as for Bingo. One-inch square pieces of chipboard may be used for markers.

Variations:

This game may be played with capital letters, small letters, shapes, colors, or words, according to the abilities and needs of the players.

Spinner. A plywood or chipboard circle, numbered from 1 to 12 and having a hand to be used as a spinner, may be constructed. Alongside the clock face may be attached a list of words which are known to the pupils and which are accompanied by illustrations. This game may be played in pairs, a pupil spinning the number of the word he is to pronounce.

As the vocabulary becomes firmly fixed, the illustrations may be removed. It is evident that this device permits the use of almost endless vocabulary lists without the need of making another spinner.

Fishing. This word recognition game is popular with pupils of all ages. Words are printed on pieces of oak tag cut in the shape of a fish. A paper clip is attached at the "fish's" mouth. A pole with a magnet at the end of the line is used "to pull in the fish." Pupils keep the "fish" they can read and throw the others back.

Variation:
This activity may be extended to letters, directions, signs, and numbers.

Vocabulary Picture Cards. This may be planned either as a completely independent activity or as one in which two or three children participate. It provides for repetition of words which will be of continuing importance to the child. While it is easier to find pictures of nouns, search will produce pictures which adequately portray verbs, adverbs, and adjectives. A picture is pasted or drawn on a 4" x 6" or 5" x 8" card, and the name is written or printed underneath it. On the reverse side, only the name appears. These cards can be used both as a study technique and as a testing device. It will be helpful to arrange them in sets of nouns, colors, verbs, etc., and to package them separately, indicating their grouping with a letter or numeral in one corner of both the cards and their envelopes.

"Who's There?" Word cards representing phonetic elements which have been taught and with which the pupils may be expected to experience success may be prepared. A child, chosen as deliveryman, knocks on a table and is asked, "Who's there?" He replies, "It is I, the deliveryman. Please open the door and let me in." The other pupil then asks, "Do you have any beans (using a word with one of the selected phonetic elements) for me, Mr. Deliveryman?" The deliveryman then delivers to the child a card with the appropriate phonetic element (in this case, a card beginning with the letter b). If the wrong card is delivered, the deliveryman loses his turn. If the pupil does not give a word beginning with one of the selected sounds, the deliveryman may say, "Not today. I have beads and bikes and bananas" (naming words beginning with the sounds selected for drill).

Sound Elements. Printed cards are placed on the chalkboard tray. The teacher or child pronounces, in a natural voice and without emphasizing the drill element of the word, a word having the same initial (or final, or medial) element as one on the tray. A child then goes to the tray and selects one beginning with the same sound as the stimulus word.

Matching Vowel-Sound Cards. A set of 30 or 40 word cards should be prepared. Each word should contain only a single vowel sound, and each word should be in the sight vocabulary of the group playing the game. Deal four cards to each of the two to four players, placing the rest of the cards in a pile in the middle of the table. The first player reads aloud any one of his cards. Any player holding a card with a similar vowel sound must give the card or cards to the caller, who then lays down the card from his hand, as well as those received from all other players, on the table in front of him. If no one has such a card, or if the caller cannot read a card in his hand, the card is placed on the bottom of the deck, and the caller draws another from the pile. He then must wait for his next turn to call for cards. The pupil wins who has the most cards in front of him when all possible cards have been matched and the pile in the center of the table is exhausted.

Phonics Word-Building Game. The teacher may ditto a complete alphabet with three, four, or five extra vowels. The children may cut these into individual letter squares, building known words from these squares. The teacher should check the record made by the pupil of the words he builds. These sets of squares should be kept in envelopes.

MATCHING ACTIVITIES. While activities of this type usually are associated with the reading-readiness stage, they may be of continuing value to any pupil who is reading at a comparatively low level. This is particularly true of the mentally retarded pupil, who both needs and enjoys relatively large amounts of meaningful practice.

Matching Pictures. Visual discrimination may be developed by matching pictures which have been cut from old magazines or catalogs. It is suggested that letters or numbers be placed on the pairs of pictures, so that the pupil may check his own work.

Matching Colors. Color matching also is a valuable readiness activity. Muffin tins or egg cartons which have one color in the bottom of each of the divisions are provided for each pupil or each small group. Pupils cut colored paper to place in the appropriate divisions, or place in them buttons or small toys which match the colors.

Variations:

- Pupils may prepare a chart or booklet with a color name, pasting into the booklet pictures which are of the color named.
- An 8½" x 11" sheet for each pupil may be prepared with the color name on the top or bottom. Children may be instructed to cut paper of that color from a magazine and to paste it on the sheet, either in a design or in free form. Each pupil will make a collage of various shades of one color.
- Paper may be folded into four boxes, to be used in conjunction with a chart which the teacher has made for reference. The chart may contain the names of any desired colors (with the names written in colored ink or with crayons). Pupils, according to their abilities, may be told to:
  - Make something in each square, according to the color indicated.
  - Make a definite number of specific things in each square, according to the number and color indicated.

Matching Color Patterns. This activity also helps prepare pupils for learning to read. For this activity, the following materials are needed: prepared patterns on small pieces of chipboard, colored wooden beads, shoe strings, and a container to hold the materials. The pupils place beads on the shoe string, according to indicated patterns, such as: three red dots, two blue dots, one orange dot, and three yellow dots.

Variations:

- The complexity may be increased by providing more difficult patterns.
- For pupils who need drill in recognizing the names of colors, the patterns may be written, rather than being shown by crayon.

Matching Shapes. Activities which are planned to help pupils recognize similarities and differences should be a part of the reading practice program. This type of exercise is not designed to help develop color recognition or discrimination; therefore, pupils should not be instructed to color these forms. The sizes of the figures may vary with the age and ability of the pupils using them.

MISCELLANEOUS ACTIVITIES. Activities are included for teaching the letters of the alphabet, for teaching letter sounds, and for recognizing sight words and phrases. The ultimate goal of word recognition exercises is the rapid, almost instantaneous identification of words. The educable mentally retarded pupil, limited in his ability to generalize, requires significantly more drill than does the average pupil if he is to develop the ability to apply word recognition skills and to reach this ultimate goal of rapid word identification. A continuing program of review of words which are introduced in reading lessons is of great importance. Suggestions are given below for exercises which will provide variety and interest.

It should be remembered that much oral language activity must be provided as the basis for the development of phonetic analysis skills; only after pupils have learned to hear the sounds for which letters are symbols can they be expected to orally reproduce these sounds. Aural recognition and oral reproduction both are requisite to the association of sound with symbol in the normal aural-visual approach to reading instruction.

Rhyming Elements. Adaptations of "Show Me" may be used orally with pupils at a very early developmental stage, or with pupils who have developed a degree of reading skill but need training in recognition of rhyming elements. Tagboard strips similar to the following may be prepared, with printed answer cards available for pupils who answer the riddle by displaying the appropriate card. "I rhyme with red; you sleep in me. What am I?" (answer: bed); "My word is can. Change one letter and get something to use on a hot day." (answer: fan); "I rhyme with look; you use me if you can read." (answer: book).

Variation:
Individual flannel boards or strip holders may be used to display the strips and answer cards.

Consonant-Sound Picture Cards. Picture cards to teach initial consonant sounds are of value to any beginning reader, particularly at the pre-compulsory and primary levels. These cards, used to motivate oral expression and auditory perception, as well as to prepare the pupil for the vocabulary he is to use, should be related to the vocabulary of the reader series which the class will use. Examples, relating to the McKee reader series, are:

M - monkey, moon, mitten, matches

C - cake, cow, cup, comb

T - turkey, tent, towels

Supermarket. Initial consonant sounds may be developed through playing at shopping in the supermarket. The teacher may prepare word cards, using names of items which ordinarily may be purchased in a market. These may include beans, banana, beet, corn, cake, candy, milk, meat, and many more items. A pupil-leader may be selected, and he may ask "Who has bought something that begins with the same sound as box?" The players who hold cards which answer the question then read them aloud. Each player may have a "shopping bag" in which he places the cards identifying the items "purchased."

Variations:

A player holding a card he cannot read may forfeit his card to another player who is able to read the item.

This may be adapted to pupils who are at a pre-reading stage by using pictures of items, without any word identification.

A combination of words and pictures may be used, thus helping to develop sight recognition of the words, as well as providing training in a phonetic analysis skill.

This exercise also may be adapted to final word elements.

My Own Phonics Book. Pupils at any level may make phonics books of 12" x 18" folded newsprint, providing a 9" x 12" sheet; each booklet should contain 10 to 15 pages. A separate booklet should be made for each consonant sound to be studied, such as b, hard c, or d. Pupils may select pictures from old magazines to illustrate the sound being studied. The teacher should so restrict these activities that only a single sound is studied on any one day. The pictures selected by the children in the class or group should be discussed before they are pasted into the book.

Variations:

A phonetic alphabet book may be made by each pupil, one page or a part of one page being used for each sound.

More advanced pupils may write sentences to illustrate the sound. These sentences may be obtained from their experience charts or from readers or other books.

Such books may contain pictures of initial consonant blends, of various vowel sounds, or almost any other phonetic element.

Matching Pictures. Matching pictures which tell stories when properly arranged contribute to the development of the ability to read. Mount several cartoons, cutting them into separate frames. Pupils then arrange them so that they tell a story. The pictures may be numbered on the back, permitting self-checking.

Classifying Pictures. Classification of pictures provides valuable learnings. The teacher provides appropriate pictures and work papers which are headed with these classifications: "animals - toys"; "work - play"; or "funny - pretty." The pupils either may place items on their working sheets and return them to envelopes after they have been checked by the teacher or may paste them onto their working paper, if the teacher desires.

Words and Pictures. The recognition of individual words may be stimulated be providing exercises in which the pupil associates words with pictures which directly illustrate these words. A stencil may be prepared containing both words and pictures; the pupil draws lines on his copy of the material from the words to the appropriate picture. A correct copy of this exercise should be posted in an easily accessible place, so that the pupil may correct his own work.

Variations:

Two words may be placed below a picture, the pupil being directed to underline the one which he believes to be correct.

The names of descriptive words may be placed alphabetically in columnar arrangement and the pupil asked to copy the correct word on a line under each picture.

Numbers may be placed by either pictures or words, with a blank line below the picture or at the side of the word. The pupil should enter the appropriate number to designate his choice.

As a variation of this exercise, words relating to the picture may be written in alphabetical order or in columns and printed in the proper place by the pupils. As a further variation, an illustration of a chart story or a story from a reader may be used; the pupils might be asked to locate the appropriate words from the content of the chart or book and write them in the proper places on the illustration.

RELATED INDEPENDENT AND SEMI-INDEPENDENT ACTIVITIES. Few practice activities are inherently motivating; the teacher must help the pupil to see that through their use he will increase his ability to read. The mentally retarded pupil must be continuingly shown the relation of the specific learning activity to the overall goal; his lack of ability to generalize makes it important that the teacher aid him in making an appropriate generalization from the specific activity in which he is engaged.

The following classroom materials and activities can be used effectively to supplement the directed reading activity and the various kinds of individual practice materials which have been described in this publication.

The Study Center. The listening post, with its recordings and tapes and the projector with appropriate slides and filmstrips, can provide a valuable supplement to the books which normally are associated with the reading lesson. Through this means, pupils may become acquainted with much literature which is within their interest and comprehension range but which is too difficult for them to read independently.

Flannel Boards. Large flannel boards may be used with groups in conjunction with reading or telling stories, for developing illustrations of material being studied in the reading lesson, and in connection with recordings of music or literature.

Individual flannel boards may be used with follow-up activities:

Matching sizes, shapes, words, colors, and pictures

The sequential arrangement of words, phrases, and sentences

The alphabetical order of letters and words

Illustrating ideas and stories

Chalkboard Drills. The chalkboard may be used very effectively with pupils in work related to reading exercises.

Individual chalkboards (made from chipboard and chalkboard paint) may be used in connection with follow-up activities: for the arrangement of words in series, for phonetic exercises, and for practicing various word endings.

Interest Centers. Exploration in other subject areas may be stimulated through interest centers within the classroom, in fields such as: science, art, music, social studies, mathematics, and written English.

Art Activities. The wise use of art activities may be used to aid comprehension of stories, heard, dictated, or read by mentally retarded pupils. These activities may include painting, sketching, clay, collage, crayon resist, lamination, and paper folding.

Cutting, pasting, and folding are recommended processes which may be used independently.

Puzzles. A valuable adjunct to the reading program is the use of either teacher-made or commercially produced puzzles which provide manipulative experiences in connection with words or stories, which develop tactile and visual discrimination, and which help to develop spatial relationships.

Kaleidoscope. Much discussion of design and stimulation for drawing patterns may derive from this simple and relatively inexpensive device.